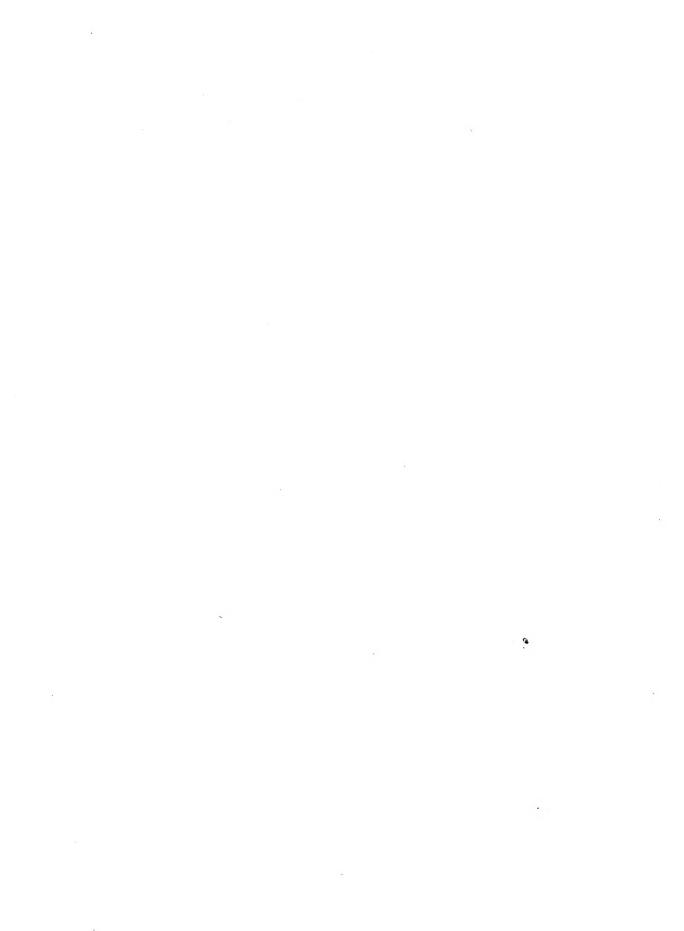






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ADVERTISEMENT.

ALTHOUGH the Author has collected many materials necessary for his proceeding in this Work, the state of his health and affairs renders the time of his intended progress in it uncertain.

the dam

Colonia Anglicana Illustrata:

OR, THE

ACQUEST of DOMINION,

AND THE

PLANTATION of COLONIES

MADE BY THE

ENGLISH in AMERICA,

WITH THE

RIGHTS of the COLONISTS, Examined, stated, and illustrated.

PART I.

CONTAINING

- If The Plan of the whole Work, including the Proposition, afferting the Rights of the Colonists, intended to be established.
- II. A brief History of the Wars, Revolutions, and Events which gave Rife to all the marine Discoveries and foreign Acquisitions made by the modern Europeans.
- III. A Survey of the Knowledge and Opinions, which the *Europ.eans* had of the Earth in Times preceding

these Discoveries; with other matters relating to this Subject.

IV. The Particulars of the Progress made by the *Portuguese*, from their beginning these Discoveries, to the death of king *John* II, and an account of the Grants made to the kings of *Portugal* of the Countries that were or might be discovered, by the Bulls of several Popes, with one of them set forth at large.

Fides PRÆSTANTION AURO.

Quaeunque igitur volueritis ut faciant vobis homines, ita et vos facite eis. Ista enim est Lex et Propheta. Math. vii. 12.

LONDON,

Printed in the Year MDCCLXIII

Id perfectum est, quod ex omnibus suis partibus constat, et certé cujusque rei potissima pars principium est. Dig. 1.1. tit. 2.

13.5

Dufit * 45 21, 50

THE Sincere Friends of Royal and Legal Authority, of Liberty, Truth, and Universal Justice, who are solicitous that all the Members of the Commonwealth may ever enjoy their Civil Rights, and partake of the Benefits of Society, with Plenitude and Security,

This DISSERTATION

Is humbly dedicated and fubmitted, by

Their most devoted, and

most obedient Servant,

The Author.



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RIGHTS

OF THE

ENGLISH COLONIES

D I S P L A Y E D.

PART I.

SECT. I.

HE manifold open attempts of our enemies, made in times of nominal peace, to execute their deep defigns formed against our plantations in America, in order finally to compass our ruin, compelled our attention to this distant object; whereupon the plainest facts and reasons would not permit us to remain insensible of their danger, and the necessity of their preservation, for the support of our commerce and naval power, and the prevention of a fatal breach in the British empire. But a right sense of this matter did not take place, until we had, by hostile encroachments, lost the possession of several essential parts of that portion of the American continent, over which their Britannick Majesties, I conceive, have, fince the treaty of Utrecht, ever had a good and clear right of sovereignty against all European claimants.

And

And whatever advances we may have made in other parts of *Plantation* knowledge, we continue, I think, in a great measure strangers to the nature and soundation of their civil rights, having little or no apprehension that they are the same with our own, and that the rights of the whole make one common cause requiring one common care and defence; yet that this is the real case I purpose, God willing, fully to evince; and, in order firmly to establish this point, which in its nature and consequences so nearly concerns the common welfare, I shall particularly consider the acquest of dominion, and the plantation of colonies, made by the *English* in *America*.

All things, every one is fenfible, are best understood when known from their beginnings, and confidered in all their relations; and, in this case, navigation preceding discovery, and discovery preceding the acquisition of empire, or making the inception of it, and the plantation of colonies being subfequent to the acquisition, or making the whole or part of it, and the Spaniard having first discovered part of America, and the fettlement of colonies there by them and the Portugals being prior to those made by the English, and the discoveries and acquisitions in America being partly connected with the preceding discoveries and conquests made by the Portugals on the coast of Africa, with their navigations to find, if possible, a passage by sea round the southern part of it to the Spice-islands, and with their consequent discoveries, possesfions, and commerce in Asia; and the claims and contests between these several kingdoms touching their respective interests in Africa, America, and Asia, and their rights of navigation upon the main ocean having been intermingled, it is proper to take a comprehensive view of the whole, in order fully to understand the establishment of the English empire in America. This will of course shew us the origin of all the European navigations to the remoter parts of Africa, to America, and Asia, and of that extensive consequent commerce, wealth and naval strength now possessed by the chief commercial and maritime states of Europe.

That in taking so large a circuit the reader may pass over as little unprofitable and unpleasant ground as possible, I shall give him a succinct account of the facts in their natural order, enlarging in point of narration and evidence, as occasion may require, beginning at a period from whence, advancing gradually, we may survey the proceedings of the serveral princes and other persons primarily and chiefly concerned in those navigations, discoveries, and acquisitions, which have so greatly encreased the knowledge of this globe, with the intercourse of its inhabitants, and wrought so great a change in the riches, manners, customs and policy of the European nations—This general account of these discoveries and acquisitions will be succeeded by a particular relation of the proceedings of the English to establish themselves in America.

The papal and royal grants, with other public acts, proper to be fet forth, shall be carefully transcribed from authentic copies of the records, or their best evidence within my power; the facts depending on history for their evidence shall be faithfully collected from cotemporary or other authors of good credit, and the whole matter fairly stated; so that the reader may be affured he shall meet only with mere involuntary errors, which after the greatest care may attend the composition of such a copious variety of transactions in different ages and countries, collected many different ways; and in the reasoning parts of this performance I shall, as often as conveniently may be, express my sentiments in the words of the most eminent authors, whereby the truth, instead of suffering by the poverty of my language, appearing in the luftre and force of their expression, will be seen in its proper beauty and strength, and being introduced in their name will be received with greater ease and pleasure. And, for the sake of order and perspicuity, I shall reduce the matter intended

B 2

to be established as a plain and certain truth to this practical proposition, That the English American colonies are part of the commonwealth, and well entitled to the rights, liberties, and benefits of it. This proposition I purpose to prove and illustrate from the acta regia passed under the great seal of the kingdom for acquiring dominion and establishing colonies in America, from the subsequent proceedings of the colonists to accomplish these designs, from the conclusions of reason, the principles of justice and equity, the nature and structure of a free state, the sense of princes and parliaments, and the opinion of philosophers, statesmen, jurists, and other respectable authors, with proper suppletory matter.

SECT. II.

Christian Æra.

4

AVING thus generally declared the occasion, matter, and manner of this Dissertation, in order to our better understanding what events, princes, and persons were mediately or immediately concerned in giving birth to those discoveries and acquisitions that have caused so great a revolution in the state of human affairs, and which continues to take place in all quarters of the world, we shall in the first place observe that the wars and revolutions in the kingdoms of Castile and Portugal, together with the Moorish war, produced those alliances and events, which, in their issues and consequences, gave rise to these discoveries, and that in the following manner.

The tyranny and misgovernment of *Peter*, surnamed *The Cruel*, king of *Castile* and *Leon*, having caused a civil war, wherein other nations took part, in 1366 *Henry* earl of *Trestamara*, his bastard brother, was proclaimed king, and *Peter* became an exile. In 1367 he was restored by *Edward* the black prince, who, at *Najara*, with 30000 men, gained

1300.

1367.

a complete victory over *Henry*, whose army consisted of 86000 *Castellans*, *French*, and *Arragonians* [a]. *Peter*, whenpossessed of his kingdom, would not fulfil his agreement made in his exile for his restoration, and the prince, after long delays, grievous to himself and his troops, being unable to obtain satisfaction, returned with his army, wasted by hardships, want, and diseases, retaining king *Peter's* daughters, given him at *Bayonne* as hostages to secure the performance of their father's engagements:

In 1368 Henry, with an army raised in France, entered Castile, to make war against Peter, whose cruelties returned with his power, the natural pravity of his mind soon effacing the faint impressions made by the excellent advice of the prince of Wales, that, upon his restoration, he should govern his subjects with clemency and beneficence [b]; wherefore Henry was joyfully received by several cities. In 1369, a battle was fought with great sury between the two brothers, wherein Peter was wholly defeated. He fled into the castle of Montiel, from whence endeavouring to escape, he was taken, and in a personal constict Henry slew him, and became possessed in a personal constict Henry slew him, and became possessed him the love of his people, which enabled him to hold it against many competitors to his death in 1379, when his son John took peaceable possession of it.

1368:

1369.

[a] These numbers, which are taken from Sandford, are mentioned as the most probable; for the Spanish, French, and English historians differ so widely in their accounts of the numbers of the two armies, and of the several corps of which they were composed, that the truth in this particular cannot be ascertained.

[4] King Peter, whom Rederic Sers-Lea, billiop of Pulenza, calls the Nevo of Spain, after the battle, put to the fword feveral noble prisoners, and was proceeding to massacre others, when the prince of Wales, who was ever gracious as well as invincible, interposed and saved them, sharply reproving him for his cruelty; and father Orleans does the prince the justice to observe that many illustrious samilies owe the preservation of their names to this hero.

1372. Rymeri Fædera. In 1372, John of Gaunt, duke of Lancaster, who then governed Aquitain, having removed the two surviving daughters of king Peter (Beatrix the eldest, who was likewise given as hostage, being dead) out of Gascoign to Bourdeaux, married Constantia the elder, in whose right he claimed the kingdoms of Castile and Leon, and in that year was summoned to parliament by the name of John king of Castile and Leon, duke of Lancaster, &c.

1380. Rymeri Fredera

On the 5th of July 1380, Ferdinand and Leonora, king and queen of Portugal, confirmed the alliances before made between them and the duke of Lancaster and the lady Conflantia, as king and queen of Castile and Leon, and promised amicably to receive Edmund earl of Cambridge (the duke's brother) coming with 1000 men at arms and 1000 archers. on his arrival in their kingdom; and, in conjunction with the earl, to make war by fea and land, at their own expence, in assistance of king John and his queen, till he should recover those kingdoms, or the greater part of them; and also promifed that, the earl of Cambridge bringing with him his fon, they would marry the infanta Beatrix their daughter to him, and cause him to be received for king after their death, according to what had been promifed by John Fernandez Andeyro in their name. Beatrix had been affianced to Henry, eldest son of John, the reigning king of Castile; but the Portuguese, moved by their solicitude to preserve the independence of their country, and to avoid in particular the Castellan Domination, shewed so great an aversion to the marriage of the infanta with the prefumptive heir of Castile, that Ferdinand apprehended, if this marriage took place, it would endanger the succession of his daughter and her descendants to his crown; wherefore he determined to recede from his contract made for it, and to provide for her a husband more agreeable to his people; for which purpose he entered into this new treaty.

In 1381 the earl of *Cambridge* departed with forces for *Portugal*, to profecute the war on behalf of the duke of *Lancafter*, taking with him his countefs *Ifabella*, youngest daughter of *Peter the Cruel*, and their son *Edward*. Upon

Christian Æra.

1381.

his arrival at Liston, king Ferdinand received him with great honor, and calling young Edward his son, presented the infanta to him, and in a little time concluded with the earl all points relating to their marriage, when they should come to

a proper age.

In 1382 the king of Castile, with an army partly raised in France, first took the field; king Ferdinand and the earl of Cambridge soon advanced with their combined sorces. On approaching the enemy, the English were impatient to come to an action, but the two kings were more inclined to accommodate matters between themselves than to hazard a battle; a negotiation issued in a treaty of peace and alkance between them, two chief articles whereof were, that the infanta Beartrix, instead of don Henry, presumptive heir of Castile, should marry don Ferdinand his brother, and that the English should be conducted home in the Castilian sleet, their own having been sent back; whereupon the earl of Cambridge returned from this expedition, which had proved so unprofitable to his brother, himself, and the kingdom.

1380,

SECT. III.

LEANOR queen of Caftile dying soon after this treaty, king John married the infanta of Portugal himself, upon an agreement solemnly confirmed by oath, whereby, to prevent an union of the two crowns, an event ever feared by the Portuguese, it was specially stipulated between him and king Ferdinand, and the nobles of each kingdom, that till an heir should be born of Beatrix, and be of age sit to govern, Portugal should be governed by its own governors and laws.

1383.

1384.

In October 1383 king Ferdinand died, and,

On the 6th of December following, John, mafter of the military order of Avis, his baftard brother, began a revolution at Lisbon, by poniarding in the palace, and not far from the prefence of Leonora, the queen dowager and regent of the kingdom, her favorite minister John Fernandez Andeyro, who was believed to have had an adulterous commerce with her in Ferdinand's life time, from whose death, by her indulgence, he governed the common wealth at his will, to the great difcontent of the people. Ferdinand, by the instigation of Leonora and Andeyro, had imprisoned his brother John; and Leonora, in the king's name, had issued a counterfeit warrant for his fudden execution in the night time; but Martin Alonzo Mela, the goaler, fuspecting the warrant, deferred the execution, whereby his life was preferved. For these causes, joined, fome authors suppose, with hopes of giving full scope and success to his ambition, John in this manner dispatched Andeyro, and the whole city approving the deed conducted him fafe home, proclaiming him the afferter and avenger of the public liberty. The queen withdrew to Alanguer, and the citizens afterward * chose John their leader, and defender of the kingdom against the king of Castile who invaded it, claiming the crown in right of his wife Beatrix, infifting that her hereditary right to it could not be defeated or prejudiced by the agreement made when he married her; notwithstanding himself held Castile in manifest defeasance of the hereditary right of princes, at the time when he thus, contrary to his pact and oath, claimed the crown of Portugal upon a supposition that this right was in its nature indefeafible and unchangeable.

The king of Cafile, determined to profecute the war with vigor, having dispatched his fleet, advanced in person with a powerful army, and laid close fiege to Liston; a famine ensued that greatly distressed the inhabitants; but, animated by their zeal for the public welfare, and conducted by the wisdom of their leader, their resolute defence, their receiving in their ex-

tremities

tremities succours sent from Oporto, by ships that, with the loss of three of their number, passed the Castilian sleet, with a raging pestilence in the king's camp, obliged him, on the 3d of September, to raise the siege and leave the kingdom; nevertheless many cities, nobles and governors of castles continued to acknowledge him their king.

John, upon his being chosen to defend the state, having fent the master of the order of the militia of St. James, and the chancellor of the kingdom, to follicit the amity and affiftance of England, king Richard the Second, then a minor, and his council, had, on the 28th of July, given them licence to Rymeri retain as many men at arms, and archers his subjects as they Fooders, pleased, and to transport them to Portugal, for its defence; and, according to Froissart, three great ships, with 500 men at arms and archers, inured to war, collected at Bourdeaux from Calais and other parts of France then held by the English, arrived at Lisbon, to the great joy of the city and its defender, in the fame week wherein king John had broke up the fiege. These men, being inclined to the war and encouraged by the marshal of Bourdeaux, went thither as adventurers; and,

On the 8th of January 1385, the council, in the name of 1385. king Richard, ordered as many ships and mariners to be Forders. taken and secured in the counties of Devon and Cornwal as should be necessary to transport Reginald de Cobham, and four others by name, and the men at arms and archers in their companies, into Portugal.

SECT. IV.

 $\mathbf{Y}OHN$, defender of the kingdom, having by his prudence, valour and amiable deportment, endeared himself to the city of Lisbon and other parts of the nation, convoked a Cortes [c] at Coimbra, at which the greater part, including

[[]c] That is, a parliament or affembly of the states.

the chief, of the nobles was not present. All the persons convened agreed that a king should be declared, but they differed in sentiments with respect to the person. At length, governed in a great measure by the necessities of the state, and a sense of fohn's excellent talents proper for the support of it, they elected, and, on the 5th of April, proclaimed him their king.

The Castellan incited by this proceeding, returned into Portugal with a numerous army, including a body of French, auxiliaries, the chief nobility of Spain making part of his cavalry. With these forces he prepared again to besiege Lisbon by land, having already a large fleet before it. But John the new king, accompanied with Nunalvarez Pereira, from whom the royal house of Braganza is descended, with a few gallant troops, of which the English, who did him notable fervice, were a finall part, on the 14th of August, encountred this army on its march near Aljubarotta, and after a severe conflict, wherein the king and Pereira performed the part of great captains and determined foldiers, entirely routed the whole Castilian army, of which 10,000 were slain in the field, many taken prisoners, and the rest put to slight. The king of Castile escaped with difficulty to Santaren; from thence passing down the Tajo he got on board a ship in his fleet lying off Lifbon, and returned to Sevil, inconfolable, not for being conquered, he faid, but because it was by those few Portugals whom he held in disdain, and that he had lost the flower of the Spanish nobility, and almost all his auxiliary troops. furrender of all the cities and towns that had adhered to the Castellan followed this victory, which the Portuguese compared to that gained by their ancestors at the battle of Orique [d], wherein they defeated a most numerous army of Moors, commanded by five kings, which gave birth to their monarchy; and in order to the perpetual commemoration of the prefent victory, the day whereon it was obtained was appointed to be

annually observed as a festival. Mariana censures the manner of celebrating it in his time, as more refembling heathen than Christian sestivity; but says it is pardonable, the liberty of their country being obtained and held by the event of this battle [e]. The new king having got full possession of the kingdom, and his discretion being equal to the occasion, in a short time reduced it into order; and, moved by his provident care, after revolving in his mind every mean that policy could fuggest for strengthening his hold of the sceptre, and securing the welfare of his kingdom; and confidering that his competitor, notwithstanding his loss at Aljubarotta, was a powerful prince, having large dominions and resources, and whose armies would probably be encreased by French auxiliaries, in consequence of the alliance between the two monarchies, and that he had a new motive of honour for his return into Portugal; he thereupon determined to divert the blow, and make Castile the theatre of war, to use all his endeavors to obtain the close alliance and aid of England, and to excite, if possible, the duke of Lancaster to seize the favorable opportunity that fortune now offered him of making war for the crown he claimed. And having, on the 15th of April preceding, conftituted the master of the militia of St. James and the chancellor his ambassadors, ratified their prior negotiations, and given them general and special powers for treating with king Richard, and the duke of Lancaster as king of Castile and Leon, on his behalf, he now used all possible address for accomplishing his purposes in England. The victory at Aljubarotta gave weight to his proposals, which were savored by the king, his council, and the parliament, as well as by the duke of Lancaster. The parliament granted large subsidies for supporting by arms the duke's claim; and all matters relating to the war, to be profecuted by the duke in conjunction with the king of Portugal being negotiated between

[[]e] Sed danda venis ob partam retentamque ejus pralii eventu patrie libertaters. Lib. xviii. cap. 9.

Christian

1386. Rymeri Fordera.

the feveral parties, on the 7th of February 1386, an indenture: was made between king Richard, and the duke as king of Castile and Leon, whereby the duke granted that in case any accommodation should be proposed between him and his adversary of Spain, he would make no agreement with him, leaving to him the crown of Spain, or any kingdom thereof,. unless he expresly granted by his letters, and obliged himselfto fatisfy king Richard respecting the 200,000 dubloons of gold formerly offered in his name, according to what king Richard was certified [f], or whatever other fum was offered to king Richard on his behalf, for the damages done to the kingdom of England and to the shipping thereof by the Spaniards; and also that perpetual alliances should take place between the two kingdoms; and in April following a league of perpetualunion and confederacy was made between king Richard, and the duke of Lancaster as king of Castile and Leon, for themfelves and their kingdoms; and in May a league of perpetual amity and mutual defence was concluded between the kings of England and Portugal for themselves and their kingdoms, together with certain conventions, whereby the Portuguese ambassadors, as some recompense of the burthens and expences which king Richard would necessarily sustain that year by the expedition of John king of Castile and Leon, duke of Lancafter, for recovery of his right, and aid of their master the king of Portugal, in his name promised and agreed that he should that summer find and send tengalleys, at his costs and charges, well armed to England faithfully, during a limited time, to ferve king Richard and damnify his enemies, requiring nothing for that fervice.

The Castellan alarmed by these measures, and by advices that Nunalvarez Percira, entring Castile with a body of troops, had defeated his commanders, who had conscred the feattered remains of the army routed at Aljubarona to oppose him, proceeded with fortitude to make the bulk preparation for

If I al ce que melme nostre Seignaur le Roy est certifyez.

Rymeri Fædera,

Rymeri Fadera,

waging war with the united forces of England and Portugal. Charles prince of Navarre his nephew, afterwards furnamed. the Noble, fon of king Charles the Bad, who had marched into Portugal with a body of troops to affift him, but came too late to take part in the action at Aljubarotta, having joined him foon after his retreat, continued with him, firmly attached to his fortune and interests. At Valladolid the king held a Cortes: there it was resolved to levy greater forces than had at any time before been in arms; that all subjects should arm themselves according to their ability, and that foreign succors should be fought. France being judged most likely to afford relief, a folemn ambaffy was fent thither. The ambaffadors, in a mournful oration made before the king [g] and the princes and lords of his council, convened at Paris on the occafion, fet forth the calamities of their country, and the danger of its fuffering by a fresh storm arising in England, observing that this enkindled flame, if not suppressed, would first burn Spain and then France. The council unanimously declared that affishance ought to be given to the king, who was a friend and ally of France; and it was refolved to fend 2000 horse, under command of the duke of Bourbon the king's uncle, for his relief, and at the same time declared that if that force was not fufficient, the king would come in person to his aid with the whole power of France. And now the troops of fix nations were destined to form two contending armies, and profecute a war the objects whereof were three kingdoms, in which every man was to fight for and against the indefeasible hereditary right of kings.

S E C T. V.

N July the duke of Lancaster sailed, with an army of 20,000 men, taking with him his dutchess Gonstantia, and his two daughters. In his passage he stopt and relieved [3] Charles the Sixth, then in the 18th year of his age.

 $Bref^n$,

Christian "Era.

x 387.

Breft, closely befieged by the duke of Bretagne, affifted by the -constable of France, when, according to Mezeray, the English who held it were reduced to great extremity. Proceeding thence to Corunna; he took fix gallies that lay in the port; but the town being well defended, he failed in his attempt to take it. Marching on he took feveral towns in Gallicia, and at length Compostella the capital. From thence he went to Oporto, and had a conference with the king of Portugal: there they entered into a more strait alliance, and, upon the king's demand, the duke readily agreed to give him in marriage his eldest daughter Philippa, by Blanch dutchess of Lancaster his The nuptials took place, and a fon of this marriage became the original mover of those navigations and discoveries which have been attended with fuch interesting consequences. At this congress the measures proper for carrying on the war in the most effectual manner being considered, it was resolved to invade Castile with their joint forces. The Castellan on the other hand, grown cautious by his misfortunes, was of opinion that his fafest method of conducting the war would be to protract it; wherefore he resolved to avoid coming to any general action, to strengthen his fortified cities, and prepare them for enduring long fieges, and to accommodate matters, if possible, with the duke of Lancaster. A pestilence had feized the English army, and carried off, Mariana says, a third part of it: this appearing favorable to his intended negotiation, he fent the prior of Guadalupe and other persons of note, with proper instructions, to the duke. They found him at Orense, which, advancing from Compostella in the spring, he had taken by capitulation, after a gallant defence made by the garrison against the vigorous assault of his troops. There, a council being held, they openly complained to the duke of the injustice of his proceeding, and explained the grounds of the Castellan's title to the crown, and of Constantia's exclusion; but in fecret they proposed a marriage between Catherine the duke's daughter by Constantia, and Henry prince of Castile, whereby

Christian

whereby the rights of the two families would be united to their mutual advantage, and their quarrel happily terminated without farther effusion of blood. This proposal was agreeable to the duke, but his alliance with the king of Portugal would not permit him to accept it. The ambaffadors perceiving his real inclinations were perfuaded that an agreement upon the terms proposed might in time be obtained, notwithstanding he openly declared that he would admit of no con-

ditions of peace without delivering up the kingdom.

The English and Portuguese troops afterwards uniting laid fiege to Benevente. During its continuance they took feveral towns of less note in the adjacent country: but Alvarez Osorio the governor defending Benevente with great bravery, and the pestilence that had in the year preceding seized the English troops, after having confiderably abated, raging with fresh violence, and the beliegers fuffering extremely by the want of provisions, a diffress caused by every mean the enemy could devife, defpairing of fuccefs, they broke up the fiege, which had continued two months, and retreated into Portugal. The French auxiliaries, who came later than the occasion required, now arrived, and were difmissed by the Castellan, who $ilde{ ext{d}}$ irectly fent ambaffadors into $ext{\it Portugal}$ to negotiate a peace with the duke of Lancaster. He lay at Troncoso, with the troops that famine and pestilence had spared. The proposals made by his adversary were favorably received, and a peace was concluded between them upon these terms: That Henry the king's eldest son should marry Catherine the duke's daughter; and in case of Henry's death before this marriage, that his brother Ferdinand should be substituted in his place: That the bride for her jointure should have Soria, Atensa, Almasan, and Molina: That the dutchess her mother should have Guadalajara, Medina del Campo and Olmedo: That the duke thould receive by certain payments 600,000 franks, besides 40,000 yearly during his life and the life of Constantia, and that the duke and dutchess should resign their claim Christian

to the kingdoms of Castile and Leons. And thus the duke of Lancaster, having by means of the sorces of Ingland and Portugal feeured to his posterity the crown he claimed, and made ample provision for himself and his dutchess, concluded the war without feeuring to England or Portugal any alliance with Cafile, or other benefit whatever, leaving to his and his country's faithful confederate the king of Portugal the fole defence of himself and his kingdom, objecting only this against him, that he had consummated his marriage before he had obtained from the pope a dispensation of his yow of continence made as mafter of Avis.

£388.

From Troncoso the duke went to Oporto, whence he proceeded to Bayonne; there the alliance between him and the king of Cafile was ratified, and in 1388 Catherine was conducted from Bayonne to Palenza, where her spoulals with prince Henry were celebrated with royal magnificence, he being near ten, and she nineteen years old. Of this marriage was born John, afterwards king of Caftile and Leon, whole daughter Isabella succeeded her brother Henry, in whose life time the married Ferdinand, afterwards king of Arragon, and first named the Catholic, by which marriage, with the subsequent descent and union of those crowns, a solid foundation was laid of the Spanish monarchy. She was a lady of a most heroic spirit, great in council and action, and, as queen of Castile and Leon in her own right, was the chief promoter of the Spanish American discoveries.

S E C T. VI.

HE king of *Portugal*, although he was thus deferted, was not dismayed; on the contrary, his spirits rising · fuperior to his augmented danger and difficulties, he resolved and prepared to carry on the war with vigor: but he was for some time prevented by an indisposition so violent that

his life was despaired of, to the great distress of his queen and kingdom. The queen's excessive grief caused her to miscarry, and it was supposed by the women about her that she would have no more children.

Christian

A cortes was held at Segovia, and a truce between England Rymeri and France, concluded on the 13th day of June in this year, Foodera. having comprehended the confederates of each nation, ambaffadors were fent from thence to John of Portugal, to know his They found him recovered of his illness; but his chagrin arising from the duke of Lancaster's treatment continued; and, according to Mariana, being grown infolent and proud with fuccess, and not sufficiently reflecting on the inconstancy of human affairs, and intending to renew the war in Galicia, he said that matter pertained not to him; so that only a truce of fix months was obtained, by the diligence of Ferdinand de Illescas, one of the ambassadors, which was no sooner expired than the Portugal besieged Tuy, and plundered the country about it. The king of Castile was afraid to hazard a battle; yet that he might not appear wholly unactive, he fent the archbishop of Toledo and Martin Juan to its relief: they came too late to prevent the city's being taken; but by their intervention a truce for fix years was concluded, and Tuy restored, with other towns taken by each

A cortes the most celebrated for the importance and variety of its proceedings was held at Guadalajara, wherein, at the king's instance, his abdication of the kingdom was considered. He apprehended that if he refigned the crown of Castile to his fon the *Portuguese* would submit to be governed by him and his queen Beatrix: but the nobles being asked their opinion would not confent to it. Before their breaking up they confirmed the truce made with Portugal for fix years.

party.

1390.

The king of *Castile* was killed by a fall from his horse.

October 9.

Henry his fon was proclaimed king at Madrid, being in the 12th year of his age, and great contentions enfued among the nobles respecting the government.

1391.

The

1392.

The time of the truce made with *Portugal* elapfing, and there not being strength sufficient to renew the war, by common consent ambassadors were sent thither, who returned in the summer to the king at *Segovia*, informing him that the king of *Portugal* would give no ear to a league, having his age in contempt, and depending on success by reason of the discord among the *Castilian* nobility. And the duke of *Benevente*, who being disgusted had gone over to the king of *Portugal*, took the field with a small body of horse, and a great number of foot, and encamped at *Pedrosa* not far from *Toro*, which caused great solicitude in the governors of the kingdom (who now united for its preservation) especially as they were in danger of a war breaking out with the *Moors*.

1395.

The court of king *Henry* removed to *Zamora*, that by nearness of the places measures might be more easily taken respecting a league with the king of Portugal, to which he was now inclined; and, after feveral months spent in settling the terms of it, it was at length agreed. That Sabugal and Miranda formerly taken from the Portuguese should be restored. That the king of Castile should not aid his step-mother Beatrix, or his uncles John and Denis, the younger fons of Peter king of Portugal by Agnes de Castro his second wife, the late king Ferdinand being his fon by his first wife Constantia, in their attempts to recover the kingdom of Portugal, of which they faid they were injuriously despoiled. That the Portugal should act in like manner, if any should invade the borders of Castile. That the prisoners on both sides should be released. On these conditions a truce for fifteen years was concluded, and about the middle of May publicly proclaimed to the great joy of each nation at Lisbon and Burgos, where the kings of Castile and Portugal then were. In this year the king of Caftile took into his own hands the government of the kingdom.

1394.

In 1394, a new embassy was sent from the king of *Portugal*, in resolute terms requiring a ratification of the truce lately made,

made, by the subscription of certain noblemen who had hitherto resused to sign it. These were the marquis of Villena, and Alfonsus earl of Gijon; the former alledging that his approbation was needless, as the whole matter had not been communicated to him; the other resused his consent till the towns in Portugal, promised him as a portion of his wife, should be delivered to him; wherefore the Portuguese ambassadors returned without having effected their purpose, and an inclination to renew the war seemed to take place.

In this year *Philippa* queen of *Portugal* was delivered of *Henry* her fourth fon, afterwards created duke of *Visco*, and master of the militia of *Jesus Christ*, the sounder of all those marine discoveries which are the subject of our present enquiry.

In 1396, king Henry's ill state of health causing him to be held in contempt by the Portuguese, occasion was sought of renewing the war against him, by complaining that the truce had not been confirmed in leason by the nobles of Castile; and war being accordingly proclaimed the Portuguese immediately took Badajoz on the frontiers, and the war was continued three years with no lefs animofity than before. In May 1397, seven Portuguese galleys, in their passage from Genoa, laden with arms and other warlike stores, being encountred by a fleet of five Castilian ships of war, four were taken, one driven ashore, and two escaped. After the victory four hundred men were thrown into the sea, and the Spanish admiral laid waste the Portuguese coast far and wide, plundering and burning the towns; and Mariena fays many nobles, influenced by the equity of the cause, or weary of the king of Portugal's government, fled into Castile. The Portuguese took the city of Tuy, and then falling with their chief force upon Estremadura they besieged Alcantara, a noble fortification in that province; but the Spaniard obliged them to raife the fiege, and laid waste their neighbouring borders with fire and fword, to the great terer of the nation. In another part the city Miranda, on the Duero, was befreged by the mafter 1396.

1397

Christian

F403.

of Calatrava, and the citizens obliged to furrender. The fierceness of the Portuguese being abated by these discomfitures. they made proposals of peace; to which Henry answered that 1398. he was neither the cause of the war, nor would obstruct a peace, provided it could be had on just and honorable terms: but they not being able to establish a firm peace the former truce only was renewed.

The truce was prolonged, and continued unto the 1st of

March 1413.

4

S E C T. VII.

ING Henry died at Tolcdo, aged 27 years, leaving three children, John, Mary, and Catherine,

1407.

The king being intered, the nobles confulted together respecting a successor. They differed in sentiments. Those who thought it grievous to wait till an infant of twenty twomonths should be of age had before their eyes all the sufferings. of the state during the minority of former kings. The deceased king's will was produced, whereby the queen and prince Ferdinand his brother were declared protectors of the kingdom, and governors of the young king; Diego Lopez de Zunniga and Juan de Velasco were appointed to take care of his persons and education, and the bishop of Carthagena to be his preceptor, inhibiting these latter to intermeddle in the affairs of government. Some contended that the will was invalid, because the king, they said, being worn with disease,. was not of a found mind on the day before his death, when it was made; and, if there was no other objection, they could by no means confent to expose the commonwealth to the waves of new tempests that would arise in case the dispositions made by the will took place. Of these things they not only in private among themselves, but likewise openly complained, without fully explaining themselves touching the expedient proper for avoiding the supposed impending evils. Upon fuitable

fuitable occasions they spoke their minds; but every one Christiandeclined the danger of first proposing for execution the meafure, which, upon deliberation, they all approved. It was don Ferdinand alone, they thought, who becoming their king could support the state; but he was by nature slow, mild, and of fingular modesty. The fex, absence, and foreign birth of the queen gave greater scope for new designs. She was at Segovia with her children, waiting the event of these motions, oppressed with grief for the loss of her husband, yet suffering no less by her fears for herself and her son. The nobles having fully confidered the matter determined in the most efficacious manner to try the constancy of don Ferdinand; and don Ruy Lopez Davalos, after many private interviews, endeavored to excite and strengthen in the prince's reluctant mind an inclination fuitable to their purpose, by an oration wherein he invited him, in the name of the nobles, who were prefent, to ascend the throne of his ancestors, which, he said, would be falutary to the commonwealth, magnificent for himfelf, and happy for them; and preffed him with reasons drawn from the necessities of the state, the nature of government, and the original institution of kings, and with illustrious examples taken from that and other kingdoms. This oration being finished, the surrounding nobles supplicated his acceptance of the crown they offered; to whom with a modest and chearful countenance he answered, that a kingdom was not so alluring to him, as for the fake of it to become infamous by his ambition and inhumanity, in despoiling an innocent child, and injuring a queen who was a widow and defolate; perfons whom he was obliged by every good reason to protect; whereby he should also prevent those violent commotions and wars that would enfue upon his granting their request. That he had the most grateful fense of their good will, and their confidence in him; but the best return he could make for their kind regards was to declare his brother's fon their king, as reason and equity required: that he would take care

of the commonwealth, as his dying brother had charged him, and would decline no labor or danger of life to serve his country; but to reign in his own name no motive could induce him. A little after this, a convention of the nobles and prelates being held in the chapel of the cathedral, don Ruy Lopez Davalos, apprehending the prince might possibly have changed his mind, asked him whom he would have declared king; whom, said he, with an earnest voice and an air of indignation, but my brother's son? whereupon John was immediately proclaimed king of Castile, first in the convention, and then in the public streets [b].

1411.

A firm and perpetual peace and concord was made between John king of Castile, Leon, &c. and John king of Portugal and Algarve, for themselves, their heirs, successors, and kingdom. On the part of Castile the treaty was made in the name of the young king, "By the authority, counsel, and "agreement of the queen dowager and don Ferdinand, his "tutors, governors, and rulers of his kingdoms; and likewise "by the confent and agreement of his council, and the pre-"lates, dukes, earls, and cities of his kingdoms," de auctoritate, confilio, et concordia dicta Domina regina domina Catherinæ genitricis nostræ, et dicti Infantis domini Fernandi avunculi nostri, nostrornm tutorum, Gubernatorum et Rectorum dictorum regnorum et dominiorum nostrorum; et pariter, de consensu et concordia gentium de confilio nostro, et prælatorum, ducum, comitum, et villarum [i] dictorum nostrorum regnorum. These are the words of the treaty as published by Leibnitz, in his Codex

" good will towards him."

[[]b] Mariana observes, that "the "glory due to prince Ferdinand for "his refusal of the crown thus offered was the greater in that he had re-"ceived from his brother, in the lat-"ter part of his life, cold and unfavorable treatment, through the mistrepresentations of those who are ac-"customed to spoil princes, in order to ruin whomsoever they dislike, and to gain favor to themselves by find-

[&]quot;ing fpots in others; but the king, before his death, being fully continued of the prince's probity and goodness, his hatred was changed into

[[]i] Villa autem propriè norat vicutum rufticanum; sed ex more Gallici idiomatis traducitur ad infignia oppida atque ipsas urbes. Spelm. Glossar. in voce Villanus.

Juris Diplomaticus, and thence inserted verbatim, in the Corps Universel Diplomatique du Droit des Gens, &c. of baron DuMont.

Christian

S E C T. VIII.

PORTUGAL florishing in peace, the king ceased not to compensate the defect of his birth by excellent actions; and fuch was the state of affairs that they feared not to carry their arms into Africa against the Moors, which, Mariana says, was the beginning of great felicity and glory to that nation.

The king made an expedition against Ceuta, at that time the strongest and richest city in all Mauritania, taking with him his three eldest sons [k], Edward 1], Peter and Henry, leaving at home his fons John and Ferdinand, they being too young to bear arms. Walfingham, who lived at the time, fays that king John made this expedition with the affiftance of the merchants of *England* chiefly, and of *Germany*.

The king failed with his forces from Lifbon.

He took Ceuta by affault.

July 25.

1415..

August 21;

In this action his fon Henry, by his bravery and good conduct, gained the highest commendations. The military virtues of this young prince were accompanied with the greatest fanctity of manners, with an ardent defire of attaining knowledge, which he devoted to the public fervice, together with a stedfast perseverance in the pursuit of what he undertook. The profecution of the Mooristo war from Ceuta into the adjacent country he left, according to Maffaus [m], to his brother Edward, as being more proper for him who was the heir apparent of the kingdom, and devoted himself to naval affairs. Of whom and his proceedings, whereby he laid the foundation.

[k] Alphonsus, his first born fon died father Edward the Third, king of Eng-Nov. 22, in the year 1400, aged ten land, and who succeeded his father to the kingdom.

[m] Hiftor, Indic. lib. j.

^[1] Named after his great grand-

of all the foreign navigations fince made by the Europeans, Nunnez de Leon, an excellent Portuguese author says [n], "He was greatly addicted to the study of geography, and the " navigations of the Spaniards both to the east and west are "owing to him: for having taken occasion from the expe-"dition to Ceuta of wandring farther, and conceived a desire " of discovering unknown lands, he prepared fleets, with "which they not only failed along the coasts of Africa, and "those maritime regions which extend fouthward beyond the "Herculean strait, but even proceeded farther; by which "means, with the industry of men and the event of tempests, " a good part of Africa that belonged to Æthiopia, and many "islands of the ocean fell to the dominion of the Portugals. "That he might the better effect these things he fixed his " residence in the kingdom of Algarve, a retired part of Por-"tugal, where the town of Sagres stands, on the sacred pro-"montory [0], whence he might fend out his fleets, and open "a way to the east; but he was prevented by death from " reaching thither."

S E C T. IX.

BEFORE entering into a detail of this prince's proceedings, in justice to his memory, and that of others who followed his example, as well as to our subject, we shall briefly consider what knowledge the more intelligent Europeans, and their Asiatic and African neighbours had of this globe in times preceding these discoveries.

Pliny fays [p], "figure is the first thing of which the sense "judgeth," and Varenius, that "it is the first of all the pro"perties of the earth, excelling not only in nobleness, but

[[]n] Lib. De vera reg. Portug. genealogia.

^[0] Cape St. Vincent. [p] Lib. ii. c. 64.

"also in utility and necessity; and that without the know-" ledge of it nothing can be demonstrated or folidly known in -" geography:" wherefore we shall first consider what knowledge or fentiments they had of the form $\lceil q \rceil$ of the earth, with its position, stability or motion, and habitableness.

According to the chronology of the great and venerable Year of the archbishop Usber, Thales the Milesian was born, whom Cicero [r], Strabo [s], Plutarch [t], Justin Martyr [u], Diogenes 3364.

Laertius [w], and LaEtantius [x], suppose to have been the first year. first, or the first of the Greeks, who made enquiries into nature. He held there is but one earth, and that it is spheroidal [y]. His followers [the *Ionic* feet] placed the earth in the midst.

Anaximander was born. He was the countryman and 3394-disciple of Thales. According to Laertius, he said the earth third year. lies in the midst as a centre, being spheroidal, and first defcribed the circumference of the earth and sea, and framed a sphere [z]. Pliny ascribes to him the invention of a sphere [a], that is, a terrestrial globe with the celestial circles described on it, as Harduin supposes [b]. Strabo, from Eratosthenes, fays [c], he first made a geographical map: And Agathemer fays [d], he first attempted to describe the habitable world in a map: According to Plutarch [e], he faid the earth in fur-

[q] The opinions of the Chaldeans, ftrictly speaking, do not fall within the compass of our intended enquiry; yet, they being perhaps the first astronemers, it may not be amiss to mention them. Diodorus Siculus [Book II] relates them thus, "Concerning the earth "they hold fingular opinions, faying "it is like a boat, and hollow; and "they abound in credible proofs con-" cerning the earth, and other things " respecting the world."

[r] Lib. De Nat. Deorum.

[s] Lib. xiv.

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[t] De plac. philof. 1. 3.
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[u] Exhort. ad Gracos.

[w] Lib. i. 24.

[x] Inflitut. 1.5.

[y] Plutarch. De plac. phil. 3. 9, 10, & 11.

[z] D. Laert. lib. ii. 1 & 2.

[a] Lib. vii. 57.

[b] In not. et emend. ad lib. ii. num. 10.

c Lib. i.

[d] Lib. i. c. 1.

[e] De plac. phil. 3. 10.

Ε

faces

Year of the faces was like to a stone pillar, and, according to Eusebius [f], that the earth was cylindroidal, and its depth one third of its breadth. Theon of Alexandria, a great mathematician in the 4th century, fays, that Eudemus a Greek, who lived some years before the Peloponnesian war, which began in the year of the world 3519, in his Astrological history, related that by Anaximander was found out that "the earth is me-"teorous, and is moved round the centre of the world."

> Anaximenes the philosopher was likewise a Milesian, and the disciple of Anaximander. He held the earth to be [g] trapezoidal [of an irregular quadrilateral form] and "that the " stars were moved not above the earth, but round the " earth [b]."

3450. 56th Olymp.

Pythagoras the Samian lived. Diogenes Laertius [i] introduces the following passage relating to his writings, contained in a letter from Lysis to Hipparchus: "When he Pytha-"goras] committed his commentaries to the care of his "daughter Damo, he charged her to give them to no one "out of the family; and when she could have fold the dif-"courses for a large sum of money, she would not, for she "thought poverty and her father's injunctions were more to-"be honored than gold." These commentaries being long fince loft, his fentiments respecting the present subject are thus expressed by Laertius [k] —" Of superficies solid figures con-"fift, of these solid bodies, of which are the four elements, "fire, water, earth, air; of them every thing is formed, and "the world is composed of the whole, animate, intelligent, "fpheroidal, furrounding the earth, which is in the midft, it-" felf also being spheroidal, and inhabited round about. "there are Antipodes, and the things which to us are below "are to them above." And, according to Pliny[l], Pytha-

[[]f] Præp. Evang. lib. i. c. 5.

[[]g] Plut. De plac. phil. 3, 10.

[[]b] D. Laert. lib. ii. 3.

[[]i] Lib. viii. 42.

[[]k] Lib. viii. 25 & 26.

^[/] Lib. ii. c. 20.

goras, in illustrating the diapason harmony or university of Year of the concent, supposed the earth to lie in the midst.

XENOPHANES the Colophonian lived. He held that the 3466.

earth in its lower part is rooted into an infinite depth.

Parmenides of *Elea* lived. Laertius [m] says, by mistake, 60° Olymp. he was the first who declared the earth to be spheroidal, and to lye in the midst, and, according to Possidonius, as cited by Strabo [n], "He divided the earth into five zones;" and, according to *Plutarch* [0], "limited the habitable parts of it "within the tropical that is the temperate] zones."

Anaxagoras of *Clazomene* in *Ionia* was born. He held 3504. "mind to be the beginning of motion; that the heavy bodies first year."

"obtained the lowest place, as the earth; that the light

"bodies tended upwards, as the fire; and that the water and

" air possessed the middle. Thus the sea subsists upon the "land, which is wide [p]."

LEUCIPPUS, the Abderite, Elean, or Melian, lived. He held that the earth is moved, being turned round the midft, SSth Olymp and that it is tympanoidal, or in form like a drum [q].

Democritus of Abdera in Thrace was born. He held Democritus of Abdera in Thrace was born. He held 3544. That there are infinite worlds, generated and corruptible [r]. So the Olymp.

" - That the earth is in form like a coit, hollow in the

" midft [s].—That at first it wandered by reason of its small-

" ness and lightness; but being in time thickened and grown

" weighty it fettled immoveable [t]. — That its breadth is the

" cause of its stability; for that it does not divide but cover

" the air beneath it [12]."

EMPEDOCLES of Agrigentum in Sicily lived. He afferted "that the circular course of the sun is the circumscription of S4" Olymp

" the world and the bound of it [w].

[m] Lib. ix. 21.

[n] Lib. ii.

[0] De plac. philos. 3. 11.

[p] D. Laertius, lib. ii. 8.

[9] D. Laert. lib. ix. 30.

[r] D. Laert. lib. ix. 44.

[s] *Plut*. De plac. phil. 3. 10.

[t] Plut. De plac. philof. 3. 3.

[u] Arist. De Cœlo, 1. ii. 3. [w] Plut. De plac, phil. 2. 1. Year of the World.

3560. 84th Olymp. first year. Herodotus of Halicarnassus in Caria was born. In the fourth division of his history, entitled Melpomene, he has the following remark respecting the earth's form: "And here I "cannot forbear laughter when I consider how many have "described the circumference of the earth, without any kind of judgment, pretending that the ocean surrounds the whole; "that the earth is round as a ball; and make Asia equal to "Europe."

3614. 97th Olymp.

Philolaus of Crotona, a city in Italy, lived. He was of the Pythagorean feet, and held, Plutarch in the placits of the philosophers fays [x], "That the earth is born in an oblique "circle round the fire, in like manner as the fun and moon"; the meaning of which words Gassendi takes to be that Philolaus thought the earth run through the zodiac, and was born round the fun as the fun and moon are commonly thought to be born round the earth. And Plutarch, in his life of Numa, has the following passage: " Numa is also said to have in-" closed the fire which was not to be extinguished with the " circular temple of Vesta, as a guard, imitating, not the form " of the earth, as if it were Vefta, but of the whole world, in "the midst of which the *Pythagoreans* think the fire is placed, "and call it Vesta and Monad; but that the earth is neither "immoveable nor existing in the midst of the sphere, but "born round the fire in a circle; neither is it one of the most " honorable or principal parts of the world." And Diogenes Lacrtius, speaking of Philolaus says [y], "it seemed to him that all "things exist by necessity and harmony; and it is said he first " declared the earth to be moved in a circle; but some ascribe "this to Hicetas of Syracuse."—It is uncertain at what time *Hicetas* lived. His opinion, as cited by *Gicero* [z] from Theophrastus, was that "the heaven, the sun, the moon, the " stars, and in short all the heavenly bodies stood still, and "that nothing in the world is moved except the earth, which

"being turned and whirled with great swiftness round its axis Year of the

"produces the same effect as if the earth stood still, and the world."

"heaven were moved."

PLATO was born at Athens. He held "the world to be 85th Olymp. fphenoidal and immortal, and that the combine 11 1 " fphenoidal and immortal, and that the earth is rolled round

"the pole [a] that passes through the universe, by that means effecting day and night [b]." Theophrassus, as cited by

"Plutarch [c], related that "Plato when he was grown old "repented his having attributed to the earth the middle place

" of the universe, as not befitting it."

Aristotle was born at Stagira, a city of Thrace. His 3620. opinion was, that " the centre of the earth and universe is the first year. "fame, and that the earth is feated immoveable in the "midft."—That "it is round, and, together with the sea, " makes one globe." For the roundness of it he assigns this reason, that "each of its parts gravitate towards the midst, "and the leffer being protruded by the greater, they do not "fluctuate; but are rather compressed, and unite with each "other till they come to the midft." -At the close of his fecond book De cælo, he observes that "those mathematicians "who have undertaken to measure the earth's ambit, say "that it amounts to 400,000 stadia." Varenius supposeth this mensuration was first made by Anaximander, and retained by

fucceeding mathematicians till the time of Eratosthenes. Epicurus was born at Gargetium, near Athens. He held 3663. that there are infinite worlds like or unlike to this—that the third year. earth is born upon the air — that it is not necessary to imagine the worlds have one form, for some are spheroidal, others like an egg, and others of other forms; but do not admit of

every form $\lceil d \rceil$.

Zeno lived. He was a native of Cittium, a Greek sea port in the isle of Cyprus. The Stoics his followers say that the 123 Olympia formation of the world is thus: "The earth is placed in the

3720.

[[]a] Theon fays, "Plato often calls axes [c] In Platon, quæstionibus."

[[]b] Plato in Timæo.

[[]d] D. Laertius, lib. x. 45 & 74.

Year of the World.

"midft as a centre; after that the water fpheroidal, having the fame centre with the earth; fo that the earth is in the water, and fpheroidal also $\lceil e \rceil$."

3729. 126th Olymp. first year. ERATOSTHENES of Cyrene was born. He was a philosopher and astronomer, and by reason of his general learning was invited into Egypt by Ptolemy Euergetes, who gave him the care of the Alexandrian library. He devised a method of measuring the earth. Pliny, who commends him greatly for it, says [f], "it was approved by all, and that according to it the earth's circuit amounts to 252,000 stadia," which measure, by Roman computation, he adds, "makes 31,500,000 paces [g]."

3782. 139th Olymp. ARISTARCHUS the Samian probably lived. His book of the magnitudes and distances of the sun and moon is supposed, by Dr. Wallis, to be the only genuine remains of his works; but Archimedes, who was killed at the taking of Syracuse, in the first year of the 142^d Olympiad*, has given us his system of the universe as follows: "Whereas the more part of astrologers have called The World, that sphere whose centre is the same with that of the earth, and the semi-diameter equal to a right line lying between the centres of the sun and the earth, Aristarchus the Samian, in his hympothesis, supposeth both the fixed stars and the sun to be immoveable; and the earth to be carried in the circum-

3792.

[e] Plut. De plac. philos. 3. 10. and D. Laert. lib. vii. 155.

[f] Lib. ii. c. 112.

[g] 1000 Roman paces, or the Roman mile, being equal to 967 English paces, 1056 of which make an English mile, 31,500,000 Roman paces, or 31,500 Roman miles, are equal to 30,460,500 paces English, that is, to 28,845 miles, 180 paces English measure; whereas Harduin, in his notes on Pliny, lib. ii. c. 112, relates that the moderns, at the time of his writing, which was in the latter part of the last

century, faid that the circuit of the earth is 10270½ leagues, each league containing 12,000 [Paris] feet, which amounting in the whole to 123,249,000 [Paris] feet, equal to 131,629,932 feet English, make 24,9 9 miles, 7 furlongs, 4 poles, 32 feet, English meafure. And Mr. Bolton, in his Introduction, dated in November 1745, to the System of Geography, published in 1747, after considering the late discoveries and mensurations, computes the circuit to be 24,840 English miles,

"ference of a circle round the fun, feated in the midst of the Year of the "courfe, and that the sphere of the fixed stars, placed round -"the same centre with the sun, is of such magnitude, that the " circle in which he supposeth the earth to be carried round " liath that proportion to the distance of the fixed stars which "the centre of a sphere hath to the superficies." Which indeed, being as Archimedes noteth (in a strict sense) imposfible, "because the centre of a sphere having no magnitude," it cannot be conceived to have any proportion to the fu-" perficies of a sphere," so he aptly expoundeth the sense of Aristarchus to be this, namely, that "whereas we conceive the " earth to be the centre of the world; that proportion which "the earth hath to what we call the world, the same pro-" portion hath that fphere in which is the circle of the earth's " motion to the sphere of the fixed stars." This is the sense of Archimedes given by Dr. Wallis, in the Preface to his edition of Aristarchus's remains. And Plutarch, in his Dialogue on the face appearing in the moon's orb, has the following remark on the hypothesis of Aristarchus, as the passage stands corrected by Monf. Menage [b]. "But," faid he, "do not " bring judgment of impiety upon us, as Cleanthes thought "the Greeks ought to accuse Aristarchus the Samian of im-" piety, as moving the altar of the world, because the man "attempted to account for the [celeftial] appearances, sup-" pofing the heaven to rest, but the earth to be moved in an "oblique circle, being, at the same time, also moved round "its own axis."

" Archimedes," according to Macrobius [i], " thought he had "found what number of stadia the moon is distant from the "furface of the carth, and Mercury from the moon, Venus " from Mercury, the fun from Venus, Mars from the fun, " Jupiter from Mars, Saturn from Jupiter: but all the space "from Saturn's orb to the starry heaven he thought he had:

[[]b] Observations on D. Lacrtius, [i] In somnium Scipionis, lib. ii. c. 3... lib. viii. 85.

Year of the "measured by reason. Which dimension of Archimedes is how-"ever rejected by the *Platonifts*, as not keeping the double "and triple intervals: and they established this belief, that the "distance from the earth to the sun is double the distance "from the earth to the moon, and from the earth to Venus " is triple the distance from the earth to the sun; and that it " is four times as much from the earth to the star of Mercury "as from the earth to Venus, and nine times as much from "the earth to Mars as from the earth to Mercury; and eight "times as much from the earth to Jupiter as from the earth "to Mars; and twenty-seven times as much from the earth "to Saturn's orb as from the earth to Jupiter. Porphyry hath "inserted in his books this belief of the Platonists, by which "he hath thrown fome light on the obscurities of Timæus." Hence it is plain that Archimedes and the Platonists placed the earth in the midst of the universe—Archimedes, in his treatise on the number of fand, addressed to king Gelo [k], observed to him that he well knew that others had undertaken to demonstrate the circumference of the earth to be about 300,000 stadia.

3858. 158th Olymp.

HIPPARCHUS, a Nicæan or Rhodian, lived. He was a mathematician and astronomer. He added, as Pliny [l] informs us, near 25,000 stadia to the measure of the earth's circuit given by Eratosthenes.

Pliny, after mentioning the measure given by Eratosthenes, and Hipparchus writes thus of Dionysodorus, whose age is unknown --- "Different credit [is to be given] to Diony fodorus; " for I shall not conceal the greatest instance of Greek vanity. "He was a Melian, famous for geometrical knowledge. "He died an old man in his country. The funeral was "attended by his relations, to whom the inheritance per-"tained. They afterwards performing just rites [to him] are

[[]k] Son of the famous *Hiero* king of by blood. Syracuse, to whom Archimedes was allied [1] Lib. ii. c. 112.

" faid to have found in the sepulchre a letter written in the Year of the "name of Dionysodorus to the living. That he had arrived -" from the tomb at the lower region, and that it was 42,000 "fladia thither. Nor were geometricians wanting, who in-"terpreted that the letter fignified that it was fent from the "middle orb of the earth, whither downwards from the "furface [ab fummo] was the longest space, and that the same "[was] the middle of the ball. From whence followed the "computation by which they declared [it] to be in circuit " 252,000 stadia."

S E C T. X.

ICERO was born, at Arpinum, a municipal town in 3000 Italy. In his fecond book De Natura Deorum, he Chill's Nativ. fays: "The whole earth is known to be placed in the centre " of the universe [in media mundi sede] folid and globose, and "every where conglobated within itself by gravitation of its

" parts [nutibus suis]."

And in The Dream of Scipio, preserved by Macrobius, his fentiments of the mundane creation are given to this effect, in the person of Scipio — " And now the earth appeared to "me fo fmall, that I repented of my command, in which I "attained only to a point of it. Which beholding still more, " Africanus faid to me, how long will your mind be fixed on "the ground? See you not into what temples you are come? "All things are connected in nine orbs, or rather globes, one " of which is celeftial, the outmost, containing all the rest— "In it are fixed the sempiternal courses of the stars that are "rolled round. Within this are seven others, revolved by a "motion contrary to that of the heaven. Of these Saturn " possesset one globe. The next is Jupiter; then Mars; "then the fun, the prince and moderator of the other lights. "His near attendants are Venus and Mercury; and in the " lowest

Year of the "lowest orb the moon is rolled, illumined by the solar rays---- " That which is the midst, and the ninth, is the earth, which " is not moved, and is the lowest, and towards it all weights " are born by their gravitation [fuo mutu]."

> And afterwards Africanus again speaking says --- "You see "that the earth is inhabited in few and narrow places; and "even in the inhabited parts, which appear but like spots, "vast wildernesses are interjected; and that those who in-" habit the earth are not only fevered, fo as nothing can pass " from the one to the other; but stand partly oblique, partly "averse, and partly adverse to you---And you see that the " fame earth is crowned and furrounded as it were with "certain girdles, of which the two most distant from each " other are rigid with frost; the middle and greatest is burnt "with the fun's heat. Two are habitable, whereof the "fouthern, in which those who stand have their feet adverse "to yours, is nothing to you; and this other lying under the "north, which you inhabit, behold how small a part of it " falleth to you: for all the earth inhabited by you, which is " narrow at the tops, and wider in the fides, is a certain little " island, furrounded with that sea which upon earth you call " Atlantic, Great, Ocean; which notwithstanding so great a " name you fee how fmall it is."

> Possidonius the philosopher, mathematician, and familiar friend of *Pompey* and *Cicero*, was of *Alexandria*. According to his menfuration of the earth, as cited by Strabo, his works being loft, its ambit amounts to 180,000 stadia; as cited by Cleomedes and Proclus, to 240,000.

The most excellent and illustrious Germanicus was born. 3989. The most excellent and illustrious Germanicus was born.

15 years before Christ. From the introduction to his translation of a fragment of the phænomena of Aratus, and his comments, it appears that he supposed the world to be round, to be placed in the midst, and that there are Antipodes. This great man being for some time the ornament of the court of Augustus, as well as the delight of the Roman people, I think it is not improbable that

the earth's rotundity and central position, if not the existence Wear of the World. of Antipodes also, were believed by the emperor and other men of learning then at Rome, especially confidering what were the fentiments of Cicero, and that Julius Cæfar had not long before reformed the Roman calendar, with the affiftance of Softgenes, whom he brought out of Egypt, where the two first points were generally believed; and moreover that Germanicus, by his expressions, seems to join in the common persuasion, rather than to advance his own particular opinion.

The excellent Strabo, the prince of geographers, who was a native of Amasia in Pontic Cappadocia, finished his geography. In the first book he concurs with Homer in declaring Year 19th. the earth to be washed round with the ocean, and in the second book he fays, "The earth with the fea is of a spheroidal "form, having one and the same surface; for as to the "eminencies they are fmall and imperceptible with respect to "the earth's magnitude; fo that it may be termed globose in "the groffer fense of the word, though not as geometricians " define a globe."

Pomponius Mela lived. He was a native of Spain. In Year 12. his tract entitled, De Situ Orbis [m], having described what is called the world and heaven, he fays. "In the midst hereof "is the earth, sublime, surrounded with the sea, and divided "from east to west into two sides called hemispheres, distin-"guished by five zones. Heat infesteth the middle, cold the "extremes; the remaining habitable parts have like scasons of "the year, but not at the same time. The Antichthones in-" habit one, we the other. The fituation of theirs being un-"known to us by reason of the burning heat of the interjacent " parts."

Seneca the philosopher, born at Corduba, an illustrious Ro- Vear 60th. man colony in Spain, was put to death by the emperor Nero. In his Natural Questions [n,] he says, "The earth is every

[m] Lib. i. c. 1.

[n] Lib. iii.

where

Christian

"where low; yet the orb, of which the feas are part, is with "them formed into a round body, and the whole unites into "the equality of one ball; but as the gradual declivities de-" ceive him who views fields, so neither do we perceive [intel-" ligimus] the convexity of the sea, and all that appears seems " plain; yet that is even with the land [terris]." Afterwards [0], he explains himself more clearly, when speaking of the mountains he says, "With regard to themselves they "furpass and are surpassed; yet nothing is so elevated but "that in comparison to the whole the greatest bear no pro-"portion; otherwise we could not say the whole orb of the " earth is a ball. The property of a ball is a certain round-"ness with equality; but then understand this equality to " be fuch as you fee in a playing ball, the feams and chinks " in it prevent not its being accounted equal to itself in every " part; as therefore in the ball those intervals affect not its "round form, fo neither do the mountains in the whole orb " of the earth, whose altitude is destroyed in a comparison " with the whole world."

Year Jou.

PLINY, who was a native of Rome, or Verona, died. his natural history $\lceil \rho \rceil$, treating of the form of the earth, he expresses himself thus. "Of the earth we say certainly it is " an orb, and acknowledge the globe to be included within "the tops [of the mountains] for we do not fay it hath the " form of an absolute orb in such height of mountains and " extent of plains; but that its circuit, comprehending therein "the heads of the lines [q], maketh the figure of an absolute "orb." Afterwards [r] he fays: "The earth in its whole "globe is girded with the circumfluent sea. Nor is this to "be investigated by arguments, but is already known by "experiments." To complete the ambit of the earth, he adds [s] 12,000 fladia to the measure of it given by Eratof-

[[]o] Lib. iv.

tops of the mountains. Hardsin.

[[]p] Lib. ii. c. 64.

[[]q] Drawn from the centre to the [s] C. 113.

[[]r] C. 66.

thenes, and makes it the ninety fixth part of the whole world, in the midst whereof he had before placed it $\lceil t \rceil$.

Christian Æra.

CLAUDE PTOLEMY of Alexandria, the mathematician, lived. Year 130th. He was called by the Greeks the most divine, wise, and admirable. He held. "That the heaven is born round as a fphere " --- That the earth also is spheroidal to sense, respect being " had to all its parts--- That the earth is in the midst of the " heaven --- That it is as a point with respect to the heavenly "bodies --- That it hath not any transitive motion --- That "there are two distinct prime motions in the heaven. One " of these motions, he says, is that by which all things are "born from east to west, making its circuit ever in like "manner, and with equal velocity, in circles parallel to each "other, to wit, those described on the poles of this sphere "which beareth all things regularly about; of which the " greatest circle is called the equinoctial, because it alone is " every where equally divided by the horizon, which is also a " great circle, and the revolution of the fun according to it "maketh every where equal day to sense. The other motion " is that by which the fpheres of the fixed stars, contrary to " the aforementioned courfe, make certain revolutions round " other poles, and not the same with those of the first circum-" volution [u],"

S E C T. XI.

ACTANTIUS, who was an African, or an Italian, Year 32c 'a composed his institutions. In the 3^d book, 23^d chapter, he expresses himself as follows: "As to those who think "there are Antipodes opposite to our feet; speak they any "thing? or is there any one so simple as to believe there are "men whose feet are above their heads? or that there those "things which lie with us hang inverse? that fruits and trees

[t] C. 13. [u] Constructio Mathematica, lib. i.

Christian "Era.

"grow tending downwards? that rain, fnow, and hail fall " upwards upon the land? and does any one admire that the "penfile gardens are reckoned among the feven wonders, "when the philosophers make both fields and seas, and cities "and mountains penfile? We must also open the origin of "this error, people being ever deceived in the same manner. "For when they have taken up any thing false in the begin-"ning, induced by the similitude of truth, they of necessity "go on to believe its confequences; thus they fall into many "ridiculous things, because things that are false have a neces-" fary agreement with their like: when therefore they believe "the first things they do not consider the nature of the con-"fequences, but by all means defend them; whereas they "ought to judge of the principles whether they be true or "false by the consequences. What reason then produced the " Antipodes? They saw the course of the stars passing into the "west, the sun and the moon always setting in the same part, "and always arifing from the fame. Therefore not discern-"ing what machination tempered their course, nor how they "returned back from the west to the cast, and thinking the "heaven to bend towards all parts, because its immense lati-"tude causes it naturally to appear so, they thought the world "was round like a ball, and from the motion of the stars ima-"gined the heaven to be rolled round: thus the stars and fun "when they fet would be born to the east by the volubility of "the world; wherefore they framed brazen orbs, as it were after "the world's figure, and engraved on them certain monftrous "figures, which they called conftellations. The confequence " of this rotundity of the heaven was concluding the earth in "the middle of it; and if so, then the earth also must be like "a globe; for that could not be other than round that was "held concluded by what was fo. Now if the earth were " round it must necessarily have the same sace towards all " parts of the heaven, that is, erect mountains, extend fields, 56 and spread seas; and if so then the last followed, that there

" is no part of the earth which is not inhabited by men and Christian "animals. Thus the rotundity of the heaven found out — "those pendulous Antipodes."

St. Augustine lived. He was born at Tagasta, a small From 354 to 430. city of Numidia. In his work entitled, De Civitate Dei [w], he has the following passage: "But what is fabled that there

" are Antipodes, that is, men in the contrary part of the " earth, where the fun rifeth when he fets to us, treading with "their feet opposite to ours, is by no means credible, nor do

"they affirm they have learnt it from any historical know-"ledge; but as it were conjecture it by ratiocination, because

"the earth is suspended within the convexity of the heaven,

"and the world hath the same place, both low and middle;

" and from this they imagine that other part of the earth which. " is beneath cannot be without men inhabiting it; not con-

" fidering that although the world be believed, or by reason-

"ing may be shewn to be of a conglobate and round figure, "it is not however consequent that the earth is not in that

" part overwhelmed with waters. Moreover though it be

" not, it does not necessarily follow that men inhabit it, as the " scripture by no means feigneth these things [quando nullo

" modo scriptura ista mentitur] which, by narration of past facts,

" merits faith, in that its predictions are completed. And it " is too abfurd to fay, that fome men paffing the immense

"ocean failed to and arrived in that part; so as there also

"mankind should be propagated [institueretur] from that one

" first man."

Aurelius Macrobius, who, in the year 422, was constituted presect or chief officer of the sacred chamber [præpositus facri cubiculi by an edict of Honorius and Theodofius [x], which makes honorable mention of him, wrote a commentary on The Dream of Scipio, in order to illustrate and establish the opinions of *Cicero*, wherein [y] he takes notice, that the earth's

[w] Lib. xvi. c. 9.

[v] Codex Theodofianus, lib. vi. [v] Lib. ii. c. 6.

ambit was 252,000 stadia.—In speaking of the order of the spheres [z], he gives such an account of the opinions of the Egyptians as supposes they held the earth to be placed in the midst.

S E C T. XII.

E must now vary our manner of proceeding so far as to take a transitory view of some unpleasant scenes. Every one knows that the swarms of military adventurers which issued out of the northern hive [a], and came into the

[z] Lib. i. c. 19.

[a] In what numbers these invaders came may partly appear from the letter of the most excellent emperor Flavius Claudius, written to the Senate and Roman people, before the great battle fought near Marcianopolis, [a city built by Trajan on the western side of the Euxine sea, and so named in honor of his sister] preserved by Trebellius Pollio; and from his letter written after the battle to Junius Brocchus, who commanded in Illyricum.

" Senatui P. Q. Rom. Claudius " princeps. P. C. militantes, audite " quod verum est, cccxx millia bar-" barorum in Romanum folum armati " venerunt: hæc si vicero, vos vicem " reddite meritis: fi non vicero, scitote "me post Gallienum velle pugnare. "Fatigata est tota resp. Pugnabimus " post Valerianum, post Ingenuum, " post Regillianum, post Lollianum, " post Posthumium, post Celsum, post " mille alios qui contemptu Gallieni " principis a rep. defecerunt. Non " scuta, non spathæ, non pila jam super " funt. Gallias et Hispanias, vires reip. "Tetricus tenet, et omnes sagittarios " (quod puder dicere) Zenobia pof-" sidet. Quicquid fecerimus satis gran-" de eft."

" feript Fathers, hear the truth, 320,000 " barbarians are come armed into the " Roman territory: if I shall overcome " them, render due thanks; if I shall " not conquer, remember that I am to "fight after Gallienus. The whole " commonwealth is spent. We fhall "fight after Valerianus, after Ingenuus, " after Regillianus, after Lollianus, after " Posthumius, after Celsus, after a thou-" fand others, who, through contempt " of the prince Gallienus, have revolted "from the commonwealth. " are neither shields, swords, nor jave-

"To the Senate and Roman people

" Claudius the prince. Militant Con-

"wealth, and Zenobia (with shame I mention it) employs all the archers. "Whatever we shall do is sufficiently great."
"Claudius Broccho. Delevimus cccxx" millia Gothorum, 11 millia navium

" lins left. Tetricus holdeth Gaul and

" Spain, the finews of the common-

" mersimus. Tecta sunt slumina scu" tis: spathis et lanceolis omnia littora
" operiuntur. Campi ossibus latent
" tecti, nullum iter purum est, ingens
" carrago deserta est. Tantum mu" lierum cepimus, ut binas et ternas
" mulieres victor sibi miles possit ad" jungere."

Roman

375.

Roman territory at many different times preceding the reign of the emperor Valens, caused only temporary wars and calamities; but, by the conduct of this emperor, the care taken by his predecessors to secure the empire against these fierce invaders was rendered fruitless; for the Huns and Alans having with incredible force and fury fallen upon their neighbours the Goths, they, under their leader Alavivus, retreated from the storm, and, being come to the banks of the Isher, or lower part of the Danube, they fent ambassadors to Valens, humbly praying to be received into Thrace, promising to live quietly, and to supply the empire with auxiliary forces when requifite. The men of wisdom and found policy at Rome were greatly alarmed upon finding that fuch vast multitudes of Barbarians, driven from their country by nations more fierce and barbarous than themselves, were hovering on the banks of the Isther, seeking to pass it, and take possession of an important part of the empire, and that a favorable reception was given by the emperor to this embaffy.

The magnanimity and noble maxims of the Romans had long been loft, together with their public virtue, and their constitution; and ambition, corruption, factions, and divisions, encreased and inflamed by delusive orations, with an insolent foldiery and traitorous leaders, had subverted the free state, leaving its members devoid of the principles of that vigorous and invariable policy which made their ancestors invincible; fo that the accidental virtues of the best emperors could do no more than postpone the downfal of this great empire,

^{· *} Claudius to Brocchus. We have " funk 2000 vessels. The rivers are " covered with shields, all the shores " are covered with fwords and fpears. "The fields lie hid being covered "with bones, no path is free from "them, a vast carrago" [The carrago was a fence made of their carriages, which they used occasionally as a defence

of their rear in time of battle, or as a "cut off 320,000 Goths. We have safeguard to their wives and children, whom they placed behind it, or to check the pursuit of the enemy in case of their flight. They were sometimes placed in an orbicular form, surrounding the whole army] " is deferted. We have taken " fo many women that the conquer-"ing foldier may take two or three to " himfelf."

whose continual declension still more and more threatened its final diffolution, without waiting long for excision by the foreign fword, which was accelerated by the measure now taken --- For at the emperor's court this request of the Goths caused rather joy than fear, his ingenious flatterers extolling his good fortune, in that he should now from remote regions gain fuch an unexpected accession of military strength,. as, added to his own, would render his armies invincible; and. that the monies annually paid by the provinces for a military fupply (who frequently chose to pay a certain fum instead of finding their quota of foldiers) would fill his coffers with treasure. Moved by these vain hopes the emperor granted the request of the Goths, and persons were dispatched with: orders to convey them over the Danube; and fuch care was taken for their passage as if no one was to be left behind that might contribute to the overthrow of the Roman empire; and being put in troops into veffels, rafts, and hollowed trunks of trees, they passed over day and night in such vast multitudes, that it was found impossible to number them [b]; and thus Ammianus Marcellinus fays the destruction of the Roman world. was brought about [c].

[b] Marcell. l. xxxi. c. 4. Negotium lætitiæ fuit potius quam timori, eruditis adulatoribus in majus fortunam principis extollentibus: quod ex ultimis terris tot tirocinia trahens, ei nec opinanti offerret, ut collatis in unum suis et alienigenis viribus invictum haberet exercitum, et pro militari supplemento quod provinciatim annuum pendebatur, thefauris accederet auri cumulus magnus. Hacque spe mittuntur diversi, qui cum vehiculis plebem transferant truculentam. Et navabatur opera diligens, ne qui Romanam rem everfurus derelinqueretur, vel quaffatus morbo letali. Proinde, permissu imperatoris, transeundi Danubium copiam colendique adepti Thraciæ partes transfretabantur in dies et noctes, navious ratibusque, et cavatis

arborum alveis, agminatim impofiti; atque per amnem longe omnium difficillimum, imbriumque crebritate tunc auctum, ob denfitatem nimiam contra ictus aquarum nitentes quidam et natare conati, haufti funt plures. Ita turbido inftantium studio orbis Romani pernicies ducebatur. Illud fane neque obscurum est neque incertum, infaustos transvehendi barbaram plebem ministros, numerum ejus comprehendere calculo sæpe tentantes conquievisse frustratos.

[c] This memorable passage happened when Valens the fifth time, and the younger Valentinian were consuls, in the last year of the 288th Olympiad, the 1128th year of Rome, and 28 years, after the first division of the empire.

Christian

The impolitic admission of the Goths into the empire was a measure that became more dangerous by the manner of its execution. When their prayer was granted, as a proper precaution, it was among other things provided, that before their passage they should deliver up their arms; but when the tribunes of the legions and other commanders of the foldiers, appointed and fent over the river to conduct this affair, came among the Barbarians, instead of doing their duty, their principal care was to get for themseves the finest women, and to fatisfy their lust and avarice; and the Goths gratifying them in these particulars, in return were suffered to pass over into the Roman territory with their arms concealed, and when there, Zosimus says, they forgot their suppliant prayers, and their oaths. This great evil daily encreasing was foon brought to an extremity by the improvidence, extortion and cruel oppression of Lupicinus and Maximus, the Roman generals who commanded in Thrace; for the Goths, before they were disposed of and dispersed, being in great want of food, upon their application for relief, such advantage was taken of their distress, that for their sustenance they were forced to give in exchange as many persons, without sparing [the sons] of their chiefs, for flaves, as were equal in number to all the dogs which the infatiability of these infamous generals could collect for this odious commerce $\lceil d \rceil$. There being a measure of patience, which human nature will not exceed, the Goths, exasperated by this and other base and cruel usage of the Roman governors, had recourse to arms, and, after some lesser encounters, Lupicinus, whose vile abuse of his power was the chief cause of their revolt, marched out of Marcianopolis with an army to fubdue them; but they attacked him with fuch conduct and bravery that they cut off the greater part of his

tuit canes, pro fingulis dederunt mancipiis, inter quae [et filii] ducti sunt optimatum. Am. Marcell. lib. xxxi. tas undique infatiabilitas colligere, po- c. 4. edit. Gronov. L. Bat. 1693. G 2 army,

[[]d] Cum traducti barbari victûs inopià vexarentur, turpe commercium duces invisissimi cogitarunt: et quan-

army, with its commanders, and forced him to make a precipitate flight into the city. This victory gave them possession of Roman arms, which were of great fervice to them in their future hostilities: and now being joined by other Gothic nations they ravaged all the open country of Thrace, spreading desolation by fire and sword, and, laying aside their humanity, in the exercise of their horrid cruelties spared neither sex nor age. Valens was at Antioch, watching the king of Perfia's motions, when the miseries of Thrace came to his knowledge. After confidering what course to take, he dispatched Victor, master of the horse, to compose matters as well as he could with the Persians; and resolving to remove to Constantinople he sent his generals Profuturus and Trajan before him to carry on the war with the Goths, which was for some time waged, by these and other commanders, with various success; at length Valens commanding in person, while he lay with his army encamped near Adrianople, and not far from the enemy, received letters from Gratian his nephew and partner in the empire, who, having gained fuch a complete victory over an army of 40,000, or, as some say, 70,000 Germans that had passed over the Rhine upon the ice and entered Gaul, that not above 5000 of them escaped, and by other success restored quiet in those parts, was now upon his march to his uncle's affistance, and earnestly prayed him to wait a little for his coming up to partake of the dangers, and not rashly commit himself alone to a precipitate engagement. A council of war being thereupon called by Valens, Sebastian general of the foot, with some others, advised him to attack the enemy directly; but Victor, master of the horse, an able and cautious officer, with whom many agreed in opinion, advised him to wait for Gratian and the Gallic troops, by which accession of strength he would be able with greater ease to vanquish the Barbarians: but Marcellinus [e] says the dire destiny of the prince pre-

[e] Lib. xxxi. Vicit tamen funesta penè jam partæ victoriæ (ut opinaperari curfu celeri fuadebant.

vailed,

principis destinatio, et adulabilis quo- bantur) consors sieret Gratianus, prorundam sententia regiorum; qui ne

vailed, and the flattering advice of certain great personages, who, lest Gratian should partake of the victory, nearly gained already, as they imagined, perfuaded him to come to a battle without delay. Accordingly he broke up his camp and marched towards the enemy, whose leaders being solicitous to gain time, at least till their horse should come up, amused himwith offers of peace, which answered their purpose; but proving otherwise fruitless, a battle ensued that began with Aug. 9, 378. unusual rage, and continued to be fought with equal bravery. and the most obstinate resolution, or rather implacable fury, until the Romans were overpowered with numbers, and flain rather than conquered, of whom scarce a third part escaping, the Roman annals contain no account of fo great a loss fuffained in any battle, fave that at Cannæ. When fortune declared in favor of the Goths, Victor and other officers did their utmost to fave the emperor, and preparation was made for his escape; but when earnestly pressed to fly, and reserve himself for better times, and the good of the commonwealth, thinking it beneath his dignity to furvive fo great a loss, he rejected the proposal, and was flain by the Barbarians. An illustrious instance of the truth of the ancient proverb, which says there is no remedy for the bite of the sycophant .--- And thus an irreparable breach was made in the Roman empire; for now nation after nation croffing the Danube and the Rhine, and victory fucceeding victory, the northern conquerors, like an impetuous torrent, rushed into it, and with irresistible force passed on until they had reduced the western world to their obedience, and Rome, the proud mistress of it, was compelled to fubmit to the rude embraces of Barbarians [f].

The common principle of these illiterate and warlike nations, it is to be remembered, was plunder and new possesfions, frequently accompanied with devastation, and such a de-

[f] Alaric king of the Wifigoths, on the 24th of August, A. C. 410, took the city by ftorm in the night time,

which had not at any time before been wholly reduced by a foreign enemy.

fruction

410.

struction of libraries, as if it was their business to make war upon learning, and wantonly waste those inestimable treasures of knowledge which the Greeks and Romans had with fo great care and diligence collected and augmented. And the liberal arts, learning, and science continuing to decline with the empire, until they were in a great measure lost or obscured, and the remains of those excellent authors, whose works have done fo much honor to human nature, which happily were preferved in these times of ravage and confusion, being neglected or undervalued, and the dark clouds of ignorance overspreading the most enlightened part of the globe, I apprehend that in these times there were not many persons who gave themselves much concern about the figure of the earth, and that the far greater part of those who thought of this matter, followed fome favorite guide, whether intelligent or ignorant, without further confideration; and the earth's rotundity had mot yet been afcertained by any circumnavigation.

S E C T. XIII.

the Roman empire, after it was enfeebled by its corruptions, nor the fole destroyers of human learning; for, in the former part of the seventh century, there came from the east a people named Saracens by the Greek and Latin authors, to whom their wandring and temperate life, with gymnastic and martial exercise, gave strength and agility, and their religious principles sierceness and valour, being sirmly persuaded that saith in their salse prophet and his revelations warranted the use of their swords against all opponents, and gave them a good title to the best habitations in this world and the next. The rapid conquests of these religious heroes, all things considered, surpassed, I think, the noble seats of any of the presenting or succeeding disturbers and destroyers of the human

race; fo that all the renowned heroes, whose glory is derived from rapine, flaughter, subversion, and devastation, and not _ from the exercise of wisdom and fortitude in founding or preferving a free state, in the defence of right and justice, or other felicitation of their fellow-creatures, might blush to see their boafted achievements, which have been followed with idle applauses, outdone by a few rambling Arabs, who quitting their former course of petty plunder, and leaving to others the care of their cattle; being encreased in their number by fugitives and other adventurers, advanced conquering city after city, and country after country, until they had fubdued all Syria [g] and Egypt, with other parts of Africa, and the greater part of Persia to their obedience, doing this in ten years, or less, from Abubeker, the immediate fuccessor of Mahomet, his sending forth, in the year of our Lord 633, the following fummons to war:.

6335-

" In the name of the most merciful God.

"Abdollah Athick Ebn Abi Kohâpha [h], to the rest of the true believers health and happiness, and the mercy and blessing of God be upon you. I praise the most high God, and I pray for his prophet Mahomet. This is to acquaint you, that I intend to send the true believers into Syria to take it out of the hands of the insidels. And I would have you know, that the sighting for religion is an act of obedience to God."

When these enthusiastic warriors fallied forth, Abubeker, after giving prudent and humane directions, respecting his troops, ordered his general Yezid, "upon obtaining a victory, to kill no little children, nor old people, nor women; to destroy no palm-trees, nor burn any fields of corn, to cut.

[g] At the battle of Yermouk, according to Abu Obeidah's letter to the caliph Omar, fuccessor of Abubeker, the Saracens killed of the Christian army about 150,000, and took 40,000 prisoners.

Ockley's Hist. of the Saracens, vol. i.

[b] These were the surnames of Mulecker, Id. ibid. p. 20.

"down no fruit trees, nor do any mischief to cattle, only such as they should kill to eat; and that when he should make any covenant or article, he should stand to it, and be as good as his word;" in the course of their conquests they exercised less cruelty than some of the Gothic nations; but they had little regard for learning; for Amrou their general having in the year 640 [i], after sourteen months siege, taken Alexandria, by command of the caliph Omar, destroyed its samous library, of which destruction Mr. Ockley [k] gives the following account:

"The Arabians had as yet applied themselves to no manner of learning, nor the study of any thing but poetry in their own " language, which they understood very well, after their way, and valued themselves upon, long before Mahomet's time, being altogether ignorant of the sciences, and every language "but their own. Amrou however, though no scholar, was a "man of quick parts, and a good capacity, and one that, "when his affairs would give him leave, was more delighted "with the conversation of learned men, and rational and phi-" losophical discourses, than men of his education commonly "used to be [1]. There was at that time in Alexandria, one " John, surnamed The Grammarian; a man eminent for "learning; with whose conversation Amrou was very well " pleased, and would often times take delight in hearing him "discourse in several sciences, and ask him questions. "man, perceiving the great respect shewn him by Amrou, ven-"tured one day to petition him for the books in the Alexan-" drian library; telling him, That he perceived he had taken an " account of all things which he thought valuable in the city, " and fealed up all the repositories and treasuries, but had taken " no notice of the books. That, if they would have been any way

after, in the year 642.

[k] Hist. of the Saracens, vol. i. p. 312, 313.

[l] Abu'lpharagius.

[[]i] This is the year affigned by Mr. Ockley for the taking of Alexandria, which, according to the chronology of Marquardus Freyerus, happened feveral years fooner. Dr. Prideaux places it

" useful to him, he would not have been so bold as to ask for them; " but since they were not, he desired he might have them. Amrou "told him, That he had defined a thing which was altogether out " of his power to grant; and that he could by no means dispose of "the books, without having first asked leave of the caliph: bow-"ever, he said, he would write, and see what might be done in it. "This he accordingly performed, and having given a due "character of the abilities of this learned man, and acquainted "him with his petition; the *caliph* returned this answer, What " is contained in these books you mention, is either agreeable to " what is written in the book of God (meaning the Alcoran) or "it is not: If it be, then the Alcoran is sufficient without them: "If otherwise, 'tis fit they should be destroyed. Amrou, in obe-"dience to the caliph's command, distributed the books "throughout all the city, amongst those that kept warm "baths (of which there was at that time in Alexandria no " fewer than four thousand [m]) to heat the baths with. " notwithstanding the great havock that must needs be made " of them at this rate; the number of books, which the dili-"gence of former princes had collected, was fo great, that it "was fix months before they were confumed. A loss never " to be made up to the learned world."

S E C T. XIV.

BUT these sons of violence who came from several quarters were not the sole enemies of human knowledge and human rights; for, in these times of ignorance, a tyranny more grievous in some respects than any of the numerous tyrannies that had preceded it was advanced and established. Those had their several limitations in point of space and duration,

[m] The most learned D'Herbelot, in his Bibliotheque Orientale, says Amrou wrote to Omar, that there were in that city 4000 palaces, 4000 baths, 40,000

Jews who paid tribute, 400 fquares, and 12,000 baccal, that is, fellers of herbs and fruits.

but this in its frame was universal and perpetual; the bodies and estates of men were only subject to those tyrannies, but this reduced their minds to an absolute submission, and confequently subjected the whole man with his possessions to those who exercised it. After saying this I need not explain myself by naming the papal tyranny. To found this tyranny the gospel of peace and good will to mankind, and the revelation of the truth, in order to their present and suture happiness, whose divine author declared that "his kingdom was not of "this world," was so perverted by glosses and corrupt additions, that its nature was changed, and, instead of being the means of human happiness, it was made subservient to the purpose of raising a boundless domination over all men, and all ranks and orders, laws and institutions made and appointed for their common good.

The first constitution in the Roman Bullary was made by St. Leo the Great. It is dated on the 11th of the Kalends of November, in the confulship of Alipius, which was in the year 447, in which year it was published. It is entitled, De rebus ecclesue non alienandis: That the estate of the church is not to be alienated. The provisions contained in it are suitable to its title; and the papal policy being comprehensive, uniform, and permanent, and having for its object power as well as possessions, this constitution may help us to understand by what means the ecclefiastic Roman empire was raised to such an aftonishing greatness. To be ever acquiring without parting with any thing was plainly the way to command the whole, especially considering how numerous the means of acquisition were; for, to raise this empire, the ignorance and bigotry of the new converts the Goths, the mifguided goodness of some, the follies of the weak and fears of the wicked, the claim of an infallible judgment in every point of faith, the boldest invasions of the prerogative of Almighty God, and the most daring pretensions to an absolute disposal of the manfions of future blifs, with every other motive that could affect

Sect. XV. ENGLISH COLONIES Displayed.

the human mind, were used, made, and urged, with a continued vigilance that fuffered no opportunity to escape; and, to complete the matter, by these delusions, and the powerful current of common error, wife men were carried way with fools.

The Roman pontifical power thus encreasing was strengthened and enlarged by the tyrant Phocas, one of the most wicked of the Roman emperors, who having been foothed by the great encomia bestowed on him and his government by the Roman pontif, St. Gregory the Great, and incenfed by the conduct of Cyriacus, patriarch of Constantinople, upon the application of pope Boniface [n] the Third, in the year 606, granted that the Apostolic see of the blessed Peter the apostle, that is, the Roman church, should be the head of all the churches, because the Constantinopolitan church styled itself the first of all the churches. His obtimuit apud Phocam principem, ut sedes apostolica B. Petri apostoli caput esset omnium ecclesiarum,

id est, ecclesia Romana, quia ecclesia Constantinopolitana primam se omnium ecclesiarum scribebat, are the words of the ancient writer of the life of Boniface the Third, preserved and published with the records of the ecclesiastical councils [0]. Henceforward it is notorious the power of the Roman pontif continued growing till it attained to its enormous height.

S E C T. XV.

THAT opinion respecting the form or habitableness of the earth prevailed during any of these great revolutions in government, learning, and religion, or rather until the

[n] 604 March 13th Gregory died. one day, Boniface was created pope. On the 1st of September following 27th he died, and the see being vacant Binius, who published an edition of the

[o] Sacrosancta Concilia Labbei et Sabinian was created pope. 605 Feb. Coffartii, tom. v. col. 1615.—Severinus

year 748, I believe, no where clearly appears. I take it for granted that the unconverted Goths, as well as the Saracens, had little or no regard to this matter; and confidering the great reverence which the Christians had for the opinions of Lastantius and Augustine, and more especially the latter, together with the circumstances of the times, I am inclined to think that their opinions generally took place among fuch of them as confidered this subject at all. I am sensible that in the beginning of the fixth century Proclus the mathematician lived. He was a native of Lycia, studied philosophy at Athens, and was a favorite of the emperor Anaftafius. In his book of the sphere he said, "the superficies of the whole [earth] "being spheroidal, is divided into five zones:" but he being a pagan who by his writings opposed the Christians with great bitterness, his fentiments in this particular were probably little attended to by those who happened to hear of them; and authors having observed that about these times, for the space of several centuries, the intercourse, that had subsisted between the inhabitants of these parts of the world, was so far interrupted by frequent wars and revolutions, that men forbore to pass from country to country, as usual, for the sake of commerce, I conclude the philosophical or mathematical notions of *Proclus* did not then make their way far westward -The narrowness and severity of sentiment, which in these times took place respecting subjects of this kind in the minds of men otherwise well informed, may partly appear from the words of the emperor Justinian, who was an ecclesiastical writer as well as great lawgiver, contained in a work of his, written in the year 553, which bears the title of, A discourse of our most pious king Justinian, sent to Mena, the most boly and inost blessed archbishop and patriarch of the happy city, against impious Origen and his profane opinions, to wit, " Moreover he

councils, in his notes on this paffage, labours to prove, contrary in my opinion to the plain fense of the words, that the edict of *Plocas* conferred no-

thing on the *Roman* church, his fentence only declaring that the title of *acumenic* belonged to the *Roman* pontif alone by Divine right.

" fupposeth

Æra.

"fupposeth there have been and are divers worlds both past and future. Who is there so stupid that hearing these

"things hath not an abhorrence of fuch excessive impiety?

"Who may not curse mad *Origen* for having devised and committed to writing such blashemies against God? The

"committed to writing fuch blasphemies against God? The which, as interdicted to all Christians, and having manifest

"conviction of impiety, we have thought unworthy of a

" refutation $\lceil p \rceil$."

In the year 748 Virgil, a presbyter, who was of a noble family in Ireland, after having spent some time at the court of Pepin, and from thence passed into Germany, while there, fell under the great displeasure of pope Zachary, for holding, as had been fignified to him by letter from archbishop *Boniface* [q], the sphericity of the earth, and the existence of Antipodes, enlightened by the fun and moon; whereupon the pope, by his letter in answer to the archbishop, gave the following directions concerning him: De perversa autem et iniqua doctrina ejus, qui contra Deum et animam suam locutus est, si clarificatum fuerit ita eum confiteri, quod alius mundus et alii homines sub terra sint, seu sol et luna, hunc, habito consilio, ab ecclesia pelle, sacerdotii honore privatum. Attamen et nos scribentes præfato duci [Otiloni duci Baioariorum] evocatorias prænonimato Vir-GILIO mittimus litteras, ut nobis præsentatus, et subtili indagatione requisitus, si erroneus fuerit inventus, canonicis sanctionibus condemnetur [r]; that is, "But as to his perverse and ini-" quitous doctrine, who hath spoken against God and his own " foul; if it shall appear that he hath so confessed, that there " is another world and other men under the earth, or fun and

[p] Sac. fancta Concilia Labbei et Coffartii, tom. v. col. 639, 640.

[q] Boniface, a native of England, was conflituted by Gregory the Third, archbishop and vicar over the churches in Germany; afterwards the same pope admonished the bishops in Bavaria and Alemania to regard Boniface as his vice-gerent. In 7+5, he obtained the see of

Mentz. In 748, he was confirmed in it by pope Zachary, who declared Mentz to be an established metropolis, and greatly enlarged its jurisdiction. Mascou's Hist. of the Ancient Germans, B xvi. § 18 and 27.

[r] Sac. fancta Concil. Labbei et Coffartii, tom. vi. col. 1521.

" moon,

"moon, a council being held, drive him from the church, being deprived the honor of priesthood. However, we also writing to the aforesaid duke [Otilo, duke of Bavaria] send evocatory letters to the aforementioned Virgil, that being presented to us and examined by subtle indagation, if he shall be found erroneous he may be condemned by canomical sanctions [s]."

After his Holiness had thus declared the belief of Antipodes to be heretical, it is needless to set forth how dangerous it was for any man subject to the papal power to profess it; and the voluntary, or necessary acquiescence of christians in the pope's determination, with that state of barbarism which prevailed in Europe, will probably account for the general silence respecting this point that continued to take place for so long a time after pope Zachary's making the aforesaid declaration. It appears clearly, I apprehend, that Ptolemy held the learned world in bondage to his errors respecting the position and stability of the earth, and the motions of the celestial bodies, for the space of 1400 years, or upwards, that is, from his

[s] How his holinefs, according to his own creed, disposed of the sun and moon when they appeared to fet in the west, until they came again into the east, I cannot comprehend, unless he had adopted the strange system contained in the topography generally ascribed to Cosmas Indopleustes, a monk who lived in the former part of the fixth century, wherein it is supposed "that " neither the heaven nor earth is spheri-"cal — that the heaven is an arched " roof, and the earth an extended plain " logger than wide — that the extreme " parts of the heaven are agglutinated "to the extreme parts of the earth — "that all the stars are moved, angels " administring to them in the motion " - that the fun hath the magnitude " of two climates, with other abfurdi-" ties." This account of this fystem

is given by *Photius*, who lived in the ninth century, in the 36th code of his Bibliotheque; who likewife fays, that " the author inferts in his work certain "historical matters that are incredible; "wherefore he is to be esteemed a fa-"bulous rather than a true writer." This author accounts for the revolutions of the heavenly bodies by fuppofing them to pass round a vast mountain of a conic form, placed to the north; and for the length and shortnefs of the days by the fun's paffing round different parts of it. This topography, as it is called, being in few hands, Fabricius, in the fecond volume of his Bibliotheca Græca, has given a figure representing the whole system, conformable to the fentiments of the author, and of his mafter Patricias the mathematician.

time to the publication of the fystem of Copernicus. The extent and duration of the co-operations of Lactantius, Augustine, pope Zachary, and his fuccessors, who, by their opinions, authority, and influence, propagated and increased the errors of Ptolemy, I am not able to afcertain; but think it probable that the disbelief of the existence of Antipodes prevailed in Christendom for 1100 years at least, that is, from the time of Augustine till the first circumnavigation of the earth was made. The belief that the earth is round not having been pronounced heretical, although pope Zachary's declaration looked that way, this opinion feems to have been held by many persons in times when the being of Antipodes was either disbelieved or little thought of -- In one of the latter ages of obscurity a treatise of cosmography, entitled, Ymago Mundi, The image of the world, was written. The author in his last book inserts the series of all the times of the transactions in the world from Adam to the German emperor Conrade, who succeeded Lotharius, and died in the year 1153, inclusive; whence I infer that he wrote not long after that emperor's death. It begins in the form of a dialogue, wherein a Christian addressing himself to a certain monk, named Honorius, on behalf of himself and many others, "requests "him to impart his knowledge to them, and describe the "position of the orb [meaning the universe] as in a picture; "because it seemed miscrable to them daily to behold the "things made for them, and with the brute beafts to be en-"tirely ignorant what they were;" wherefore, in compliance with this request, and "for the instruction of many unpro-"vided with a plenty of books, he published this book, " calling it the Image of the World, because in it the dif-" position of the whole universe might be viewed as in a glass; "and in which also he might leave to posterity a token of his " friendship; for he put nothing in it but what the tradition " of the ancients commended." In his chapter of the form of the earth he fays that "it is round"—that "the circuit of

"it is measured 180,000 stadia, which is computed 12,052 "miles"---that it is furrounded with the ocean as with a "border." In the next chapter he fays, "the earth is dif-"tinguished into five zones, that is, into five circles, of which "the two outward are uninhabitable through cold, the middle " is uninhabitable through heat, from which the fun never re-"cedeth; to those he never accedeth. The two middle are " habitable, being tempered on the one fide with heat, on the " other with cold." The migrations of philosophy that fucceeded the aforementioned, and other subsequent revolutions, ferved to enlarge the credit of Ptolemy; for the Saracens after making their great conquests became inclined to learning, and Bullialdus [t] fays, "their princes and caliphs took "care to have a great number of Greek books in all sciences "and arts rendered into Arabic; and that in the year of Christ "827, of the hegira 212, the mathematical fyntax of Ptolemy, "by order of Maimon king of the Saracens at Babylon was " rendered into Arabic; whereupon in a short time there "arose among the Arabs great and famous philosophers and "aftronomers."

712.

In or about the year 712, the Saracens, having extended their conquests in Africa from Egypt to the Atlantic ocean, passed into Spain, being invited by count Julian, whose daughter king Rhoderic had ravished. To excite Muza, who under Ulit Miramamolin [u] governed Africa, to make this invasion, he observed to him that the time was come for the Saracens to conquer Spain, whence marching on with their victorious arms all Europe would fall under their subjection; that Spain was in such a state that dispatch would give certain success to the enterprise, and that he did not doubt his being able, with his associates and their sollowers, when assisted by a few troops, which would be admitted with ease, as he commanded the country lying on each side the strait [w], to try

[[]t] In prolegom. ad Astron. Philo-notes supreme empire.

[w] He commanded the most south-

[[]n] This word, Mariana fays, de- ern part of Spain, including the city

713.

the strength of Rhoderic, and overthrow the kingdom. Count Christian Julian having great talents for diffimulation as well as bufiness, while carrying on his deep defign of destroying his king, and fubjecting his country to an infidel and foreign enemy, continued to be the king's chief favorite, fo that by his advice the king fent his forces into Africa and Gaul for the better defence of the inland frontiers of his kingdom, leaving the heart of it without proper fecurity, and thereby facilitating the count's traitorous purpose. Upon the arrival of the Saracens count Julian having joined them, after divers less encounters, wherein they prevailed over the Goths, in 713, a general battle was fought, in which the Saracens obtained a complete victory; whereupon they ravaged Andaluzia and Lusitania, and took the city of Seville, with other places of less note; and, in 714, the Saracens being strengthened by fresh forces from Africa, and king Rhoderic having made the best preparation for the defence of his kingdom, the two armies approaching, after various skirmishes on seven successive days, on the eighth a great battle enfued, in which the Saracens were commanded by Tariff, and the Goths by Rhoderic their king, which being fought with equal bravery continued a long time doubtful; at last the Saracens began to give ground, when archbishop Oppas [x], having hitherto diffembled his perfidy, according to his horrid agreement, with his body of men deferted the Christian army, and went over to the enemy, and joining count Julian, who led a strong body of Goths, they attacked the king's army on that fide which the archbishop's desertion had laid open, whereby they gave victory to the Saracens, attended with so great a carnage that the number of the slain

Heraclea, now named Gibraltar, and the remains of the Gothic dominion in Africe.

[x] Oppas was the brother, or, as forme fay, fon, of king Witiza, the immediate predecessor of Rhoderic, whose Jons were fet afide to advance Rhoderic

to the throne. He was first promoted to the archiepiscopal see of Seville, and translated thence to that of Toledo, to be held jointly with Sinderedes the rightful archbishop, who consented to it through fear of Witiza.

could

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could not be taken. This one battle, Mariana [y] fays, "took away all the ornaments of Spain; there the name of "the Goths perished, with their warlike virtue, their same of "past actions, and hopes of suture glory, and that empire "which had stood upwards of 300 years was compressed by a "fierce and cruel nation." Tarapha, in his history of the origin and achievements of the kings of Spain, says that the Saracens in thirty months conquered all the country lying between the extended sea coast and the Pyrenees, excepting Cantabria and Asturias [z].

The Saracens being thus fettled in Spain when learning was cultivated by their countrymen in the east, by means of the continued intercourse between them, astronomy and the peripatetic philosophy, with other parts of learning, were introduced into Spain, and the western Europeans afterwards by their communication with the Saracens received from them the knowledge of astronomy, "of which (Bullialdus fays) "there was fcarce any mention among us, who wallowed in "the mire of barbarism;" and about the year 1230, by order of Frederic the Second, emperor of Germany, Ptolemy's mathematical fyntax was translated from Arabic into Latin. Ptolemean tables were then become erroreous; wherefore Alphonfus, king of Caftile and Leon, furnamed the Wife, who began to reign in the year 1252, having convoked the Fixes and Arab Moors most skilled in astronomy and other mathematical knowledge, ordered and procured those tables to be formed called from him Alphonfine, expending on this work 40,000 ducats. Aftronomy being thus received by the Europeans, and supported by royal favour, many were excited to cultivate it; nevertheless Ptolemy's system of the mundane

[y] Lib. vi. c. 23.

bishop of Palenza, in his Spanish history, part II. chap. 37. cites Lucas Tudensis, that is, Lucas of Tude, now Tuy, relating that a greater number of the Saraceus only were killed.

^[2] He adds, that in the various battles which in two years were fought in spain, about 700,000 men were faid to have been flain on both fides. Although this number is so large, the

Christian.

creation still held its credit. He was doubtless a genius, who with an exuberant imagination and fertile invention had. learning, knowledge and great application; but proceeding upon a wrong principle his talents were employed in completing and establishing a false system; yet his reasons were fo specious, and his devices seemed so ingenious and probable, that, although fome few were diffatisfied with it, no professed adverfary appeared in the field of fame against him, of which, without having any title founded in truth and nature, he held the possession until the system of Philolous, and other Pythagoreans, and of Aristarchus was restored by Copernicus, by whom, Bullialdus [a] fays, "the trifles of the Ptolemaio "hypotheses, and the involutions of multiplied circles were " taken away, and the minds of men reduced to a physical " fimplicity."

And with respect to the sovereigns of the pontifical empire, when it is confidered that their fubjects were trained up from their infancy in a system of prejudices devised for the support of it, including the most refigned credence, passive obedience and firm allegiance to it, with active refistence of all its opponents --- that the two volumes of reason and revelation were by these infallible interpreters expounded and controlled at their pleasure --- that the forces of this divine empire, spread over all its parts, composed of regulars and seculars, the latter being drawn from their first laudable service, exceeded in number as well as vigilance those of all the civil governments in christendom [b], and were kept under exact discipline, and in constant pay of the princes whom they overruled and the people whom they enflaved---that by these means the Roman pontiffs were enabled to establish and enforce their decrees and declarations, howfoever repugnant to fense or reason, truth or justice, or to the rights of princes or subjects, and --- that all

how juftly I cannot fay, to amount to

[[]a] In prolegom. ad Aftronomiam included) have been fince computed, Philolaicam.

[[]b] The regulars alone (all the corps—two millions.

the kingdoms and commonwealths, though each in its proper nature was a compact politic body of men, united for defence against external violence or intrusion, and for the preservation of order, peace and justice among its members, holding its dominion under God alone, by this accumulated power were rent usunder, and brought under subjection to the dominant pontifical state; these sovereigns having thus obtained so great power and influence over the minds of men, and their nearest and most important concerns, it cannot, I think, be difficult to conceive that they should be able to regulate at their pleafure the common belief respecting the other hemisphere and its inhabitants, and to prevent the advancement of any opinion declared heretical touching them.

S E C T. XVI.

Magetiane2.

1519.

Charles 5th

Proved beyond all power of contradiction that the earth was round, and the other hemisphere inhabited, and enlightened by the fun and moon; for in the year 1519, Fernando Magellanez, a native of Portugal, who had distinguished himself by his great bravery and advancement of his prince's fervice in Asia and Africa, being disgusted by unfavorable treatment, abjured his faith to his king and country, erroncoully supposing that he could thereby discharge himself from the duties of his birth, and going into Spain offered his service to Charles the Fifth; and it having been some years before agreed between Portugal and Spain that the former should have the eastern half of the world, and the latter the western half for their navigation, and that the Spaniards should not make use of any passage discovered by the Portuguess, he, supposing the earth to be globose, afferted that the Molucca islands lay within the Spanish division, and proposed the

6т Christian

the discovery of a new way thither, by proceeding in a contrary course to that of the Portugals. His proposal being accepted, and five ships for the execution of the enterprize pre-

pared and put under his command, on the 20th of September, Toynge of the Villoy he departed from Barameda, at the mouth of the Guadalquivir. sound the Globe. In the course of the voyage had a 100 11 116

In the course of the voyage he lost his life; one of the ships, named the Victory, compassed the globe, the others being

loft, or otherways prevented, and on the 6th of September

1522, arrived at the haven from whence she departed, laden

with cloves and other spices, they having to their great sur-

prize, though in the nature of the cafe it could not be other-

wife, lost one day by their circumnavigation. Eighteen

persons only returned in the ship, who being brought before

the emperor agreed in their accounts of the voyage; and the

emperor's fecretary having with all diligence examined the

captain's relation, conferred with every mariner who returned

with him, and again found their narrations to be confiftent,

wrote a history of the voyage, which was published. Adrian

the Sixth was pope when the Victory returned, being created

on the 9th of January in the year 1521. He had been pre-

ceptor to the emperor, and was prefident of his council for

Indian affairs appertaining to the crown of Spain when charge.

was given to Magellanez to fearth out the Molucca islands;

and Peter Martyr a Milanese, who was protonotary apostolical, Teter Martyr.

and a member of that council; foon after the Victory's arrival

fent his holiness an account of it, and of her having surrounded the earth, which now makes part of the fifth decad of his

history of the discovery of the New World. And Anthony, Anthony Piga Citte

Pigafetta, a native of Vicenza in Italy, who proceeded on this

voyage, and returned in the Victory, and was afterwards made

a knight of Rhodes, likewise wrote a history of it. The first

of these authors, speaking of this navigation, said it was the

most marvelous thing that ever was done by man upon the

earth fince the first creation of the world, and never found before or known, or attempted by any other; and Peter

Martin

5

15224

Martyr, who was called the Pliny of his age, in his discourse, termed it a strange and incredible compassing of the world. And in a conference afterwards had between the learned Butrigarius and Fracastorius, the former observed how much the world was obliged to the Portuguese, rehearing their great exploits in India, what lands and islands they had discovered, and how by their navigations they had made the whole world to hang in the air.

Truth is ever attended with a happy coincidence of all its parts, and the rotundity of the earth being thus afcertained evidently shewed that it was capable of diurnal and annual motion, with which the other supposed forms were wholly inconfistent or less suitable; and the other hemisphere being at the same time proved to be inhabited, those who had held the contrary opinions, together with its central position and stability, had a new motive, the conviction of their past error with respect to the former, to induce them to consider with candor the reasons offered against the latter.

Copernicus, who was a native of Thorn, and a canon of the cathedral church of Worms, at the time of this circumnavigation was labouring to restore and perfect the true system of the mundane creation. In 1507 he began his work, entitled, Of the revolutions of the celestial orbs, containing this celebrated fystem, That the sun is immoveable in the midst, governing the motions of the planets which he enlightens, being placed round him in the following order. Nearest to the fun he placeth Mercury; then Venus; then the earth, with the moon; next Mars; then Jupiter; and laftly Saturn; and round the planetary region he placeth the sphere of the fixed stars, immoveable as the fun is. In 1530 he had gone thorough his work, and having afterwards from time to time made fuch additions and alterations as further confideration occasioned, when completed, the manuscript, with a preface to pope Paul the Third, was delivered to Gyfus; he fent it into Saxony to Rheticus, who caused it to be printed at Nurenburgh, under

under the care of Schoner, Ofander, and others. Ofander Christian was not only an inspector of the publication, but added a short preface, the defign of which was to excuse Copernicus, who had held the motion of the earth not only for an hypothesis, but also for a true placit, by supposing that he had assumed this motion not for a principle, but for a mere hypothesis, thereby to foften the matter for the fake of those who might otherwise be offended. When the edition was completed Rheticus fent a copy to Copernicus, who having been feized with the palfy, his memory and understanding were debilitated when he received the book, which came to his hands but a few hours before his death, on the 24th of May 1543, he being then in the 71st year of his age.

S E C T. XVII.

HE reformation at this time taking place, and learning reviving, the greater freedom of enquiry and more general knowledge which enfued, together with the novelty and nature of the subject, caused of course a particular attention to be given to the fystem of Copernicus. Many powerful adversaries opposed it with vehemence, as repugnant to all true faith and philosophy; yet able advocates were not wanting for its proper support and plenary defence against all objections injudiciously drawn from these sources. The controversy encreasing the court of Rome interposed, endeavouring to filence by power the arguments offered in behalf of it.

Michael Mæstlin, who was some time professor of mathematics at *Heidelburg*, having spent his younger years in *Italy*, while there made a public oration in the Lyceum in defence of the Copernican system. Galilao, who had before strenuously held that of Ptolemy, being one of his auditors, upon confidering his arguments, was fo fully convinced by them, that quitting his former opinion he embraced the system of Coper0.4

Christian mores; and being chief mathematician to the duke of Tufcany, he endeavoured by his lectures, as well as by his correspondence with mathematicians in Germany, to advance and establish this system.

1615.

Paul Anthony Foscarini, a Carmelite friar, published at Naples an epiftle in Italian to Sebastian Fanton general of his order, dated the 6th of January in that year, entitled $\lceil c \rceil$, "Of the "opinion of the Pythagoreans and of Copernicus, of the mo-" bility of the earth and stability of the sun, and of the new " fystem or constitution of the world; in which the authorities " of facred scripture, and the theological propositions com-"monly brought against this opinion are reconciled with it."

Galilæo was cited before the holy office of the inquisition at -Same year. Rome, for holding as true a false doctrine, afferting the sun's

stability and the motion of the earth. And,

1616. , Seb. 25.

It was decreed in the holy congregation, held before pope Paul the Fifth, that cardinal Bellarmine should enjoin Galilao to recede from this false doctrine, and that upon his refusal he should be charged by the commissary of the holy office wholly to renounce it; to which if he should not submit, he was to be cast into prison. On the next day, in presence of the cardinal who admonished him, he was enjoined by the commissary to defist entirely from this opinion, and upon promifing obedience he was difmiffed.

Buch, c

By decree of the holy congregation of the Index the Pythagoric doctrine, which Nicholas Copernicus on the revolutions of the celestial orbs, and Didacus Astunica upon 70b, taught, and was by many received, as might be feen by the epiftle of Foscarini [aforementioned] was declared false and adverse to facred scripture; the books of Copernicus and Astunica were fuspended until corrected; but Foscarini's epistle was altogether prohibited and condemned, and all other like books

Sole; et Il nuovo Pittagorico Sistema del Mondo, in Neapoli per Lazzaro Scoriggio 1615.

[[]c] Lettera del Rev. Padre Maestro Paolo Antonio Foscarini Carmelitano, sopra l'opinione de Pittagorici, e del Copernico, Lella mobilità della Terra, e stabilità del

were thereby prohibited, as appears by the decree published with other decrees of like nature, and the *Tridentine* Index, – at *Rome* in 1664, in the following words:

Christian Æt...

Decretum XIV.

Sacræ Congregationis Indicis.

"C UM ab aliquo tempore citra, prodierint in lu-" cem inter alios nonnulli li-" bri, varias hæreses atque er-" rores continentes, ideo Sacra " congregatio Illustriss. S. R. " E. Cardinalium ad Indicem " deputatorum [a], ne ex eo-" rum lectione graviora in dies "damna in tota republica " Christiana oriantur, eos om-" nino damnandos, atque pro-"hibendos esse voluit; sicuti " præsenti decreto penitus "damnat et prohibet ubicun-" que et quovis idiomate im-"pressos aut imprimendos. " Mandans ut nullus dein-

[a] In Decreto primo ad hunc modum indigitantur, scilicet S. R. E. Presb. Cardinales, à S. D. N. [papa nominatim commemorato] Sanctaque Sede Apostolica super librorum permissione, prohibitione, expurgatione et impressione in universa republica Christiana specialiter deputati.

Decree XIV.

Of the Sacred Congregation of the Index.

"ITTHEREAS for some time " past there have come " forth among others fome " books containing various he-" refies and errors, therefore the "Sacred Congregation of the " most illustrious Cardinals of "the Holy Roman church " deputed for the Index [a], " left by the reading of them " more grievous damages dai-" ly arise in the whole Christi-" an commonwealth, hath "willed that they be ut-" terly condemned and prohi-" bited; as by the present de-"cree it entirely condemn-" eth and prohibiteth them, "wherefoever and in what " language foever imprinted, " or to be imprinted. Com-" manding that no one hence-

[a] In the first Decree they are entitled, Presbyters Cardinals of the holy Roman church, specially deputed by our holy Lord [here naming the pope] and the holy See Apostolical, for the permission, prohibition, expurgation, and impression of books in the universal Christian commonwealth.

K "ceps,

" ceps, cujuscunque gradus et " conditionis sub pænis in Sa-" cro Concilio Tridentino, et " in Indice librorum prohibi-"torum contentis eos audeat " imprimere, aut imprimi cu-"rare, vel quomodocunque " apud fe detinere, aut legere. "Et sub iisdem pænis qui-"cunque nunc illos habent "vel habuerint in futurum, " locorum Ordinariis, feu In-"quifitoribus, statim a præ-" fentis decreti notitia exhi-" bere teneantur. Libri au-" tem funt infra scripti vide-" licet [Quorundam librorum " tituli hic inferuntur]."

"Et quia etiam ad noti"tiam præfatæ Sacræ Congre"gationis pervenit falsam illam doctrinam Pythagori"cam, divinæque Scripturæ
"omnino adversantem, de mo"bilitate terræ, et immobili"tate solis, quam Nicolaus
"Copernicus de revolutioni"bus orbium cælestium, et
"Didacus Astunica in Job
"etiam docent, jam divulgari,
"et a multis recipi, sicuti vi-

" forth of whatfoever degree and condition under the penalties in the Sacred Coun-" cil of Trent, and in the In-" dex of books prohibited, " contained, prefume to im-" print, or cause to be imprinted, or in any wife keep by " him or read them. And under the fame penalties " whofoever now have, or " hereafter shall have, them, " are held to give them to the " Ordinaries of the places, or " Inquisitors, immediately on " notice of the present decree. "The books are the under-" written, to wit [Here the " titles of certain books are in-" ferted]."

"And because it hath also " come to the knowledge of " the aforefaid Sacred Congregation that that false Pytha-" goric doctrine, and altoge-" ther adverse to divine Scripture touching the mobility " of the earth, and immobility " of the fun, which Nicholas "Copernicus on the revolu-"tions of the celestial orbs, " and also Didacus Astunica " upon Job, teach, is already "divulged, and by many re-" ceived, as may be feen by a " dere

" dere est ex quadam episto-" la impressa cujusdam patris " Carmelitæ, cui titulus; Let-" tera del Rev. Padre Maestro " Paolo Antonio Foscarini Car-" melitano sopra l'opinione de " Pittagorici, e del Copernico, " della mobilita della Terra, e " stabilità del sole; et il nuo-"vo Pittagorico sistema del " mondo, in Napoli per Laz-" zaro Scoriggio 1615, in qua " dictus pater ostendere cona-" tur, præfatam doctrinam de " immobilitate folis in centro " mundi, et mobilitate terræ, " consonam esse veritati, et non " adversari Sacræ Scripturæ: " ideo ne ulterius hujusmodi " opinio in perniciem Catho-" licæ veritatis ferpat, censuit " dictos Nicolaum Coperni-"cum de revolutionibus or-" bium, et Didacum Aftunica " in Job suspendendos esse do-" nec corrigantur. Librum " verò patris Pauli Antonii 🛰 Foscarini Carmelitæ omnino " prohibendum atque dam-" nandum, aliosque omnes "' libros pariter idem docentes,

" certain printed epistle of a " certain Carmelite father, en-" titled, A letter of the Rev." Father Master Paul Anthony " Foscarini, a Carmelite, upon "the opinion of the Pythago-" reans, and of Copernicus, of " the mobility of the earth, and " stability of the sun: and the $\lq\lq$ new Pythagoric fystem of the " world, in Naples by Lazarus "Scoriggio 1615, in which " the faid father endeavoreth "to shew that the aforesaid " doctrine of the immobility " of the fun in the centre of " the world, and the mobility " of the earth is consonant to " truth, and not adverse to Sa-"cred Scripture: therefore " that fuch opinion may spread " no further to the destruction " of Catholic truth, it hath "thought fit that the faid " Nicholas Copernicus upon "the revolutions of the orbs, " and Didacus Aftunica upon " Job, be suspended till they " be corrected; but that the "book of father Paul An-" thony Foscarini the Carme-" lite be wholly prohibited and " condemned, and all other " books, in like manner teach-" ing the same, be prohibited, K 2 " proChristian

" prohibendos, prout præfenti " decreto omnes respective " prohibet, damnat, atque "fulpendit. In quorum fi-" dem præfens decretum ma-" nu et sigillo illustrissimi et " Reverendissimi D. Cardina-" lis Sanctæ Cæciliæ, episcopi " Albanen. fignatum et mu-" nitum fuit." die 5 Martii 1616.

P. Epif. Albanen. Card. San&. Cæciliæ.

> Locus + Sigilli. Regist. fol. 90.

F. Franciscus Magdalenus Capiferreus Ord. Prædicat. Secretarius.

" as by the prefent decree " it respectively prohibiteth, " condemneth, and fuspend-" eth them all. In affurance " whereof the prefent decree " is figned and confirmed with "the hand and feal of the " most illustrious and Right " Reverend Lord Cardinal of "St. Cæcilia, bishop of Albano," the 5th day of March 1616.

P. Bp. of Alba: Card. of St. Cæcilia.

> The place + of the Seal. Reg. fol. 90.

B. Francis Magdalene Capiferreus of the Order of Preachers,

Secretary.

erunt

1620.

Copernicus's tract was permitted to be read with certain emendations by the following decree of the Sacred Congregation of the Index.

Decretum XXI.

Sacræ Congregationis Indicis.

QUANQUAM fcripta Nicolai Copernici no-

" bilis astrologi, de mundi " revolutionibus, prorsus pro-

" hibenda esse patres sacræ

" congregationis Indicis censu-

4

Decree XXI.

Of the Sacred Congregation of the Index.

"A LTHOUGH the fathers of the facred congrega-" tion of the Index were of " opinion that the writings of " Nicholas Copernicus, a fa-

" mous aftrologer of the revo-

Christian

" erunt, ea ratione, quia princi-" pia de fitu et motu terreni " globi, facræ scripturæ, ejus-" que veræ et catholicæ inter-" pretationi repugnantia (quod " in homine Christiano minime " tolerandum est) non per hy-" pothesim tractare, sed ve-"rissima adstruere non du-" bitat: Nihilominus, quia in " iis multa funt reipublicæ " utilissima; unanimi con-" fensu in eam iverunt fenten-"tiam; ut Copernici opera " ad hanc usque diem impres-" fa, permittenda essent, prout " permiserunt; iis tamen cor-" rectis, juxta fubjectam emen-" dationem locis in quibus " non ex hypothefi, fed affe-" rendo, de situ et motu ter-" ræ disputat. Quia verò de-"inceps imprimendi erunt; " nonnisi prædictis locis, ut " fequitur, emendatis, et hu-" julmodi correctione præfixa " lutions of the world, should " be wholly prohibited, by rea-" fon that he feareth not to " treat of (not by hypothesis, " but to advance as most true) " principles, respecting the "fituation and motion of the " earthly globe, repugnant to " facred fcripture, and the true " and catholic interpretation " thereof (which is not to be " born in a Christian man): "Nevertheless, because in " them are many things most "useful to the common-" wealth; by unanimous con-" fent they agreed in this opi-" nion, that the works of Co-" pernicus imprinted to this " day should be permitted, as " they have permitted; those " places however being cor-" rected according to the fub-" joined emendation, in which " he disputeth concerning the " fituation and motion of the " earth not by hypothesis, but " by affertion. And because "they will hereafter be im-" printed, they are not permit-" ted unless emended as fol-" loweth in the aforefaid " places, and a correction of "this kind prefixed to the "Coper-

-Part T.

70

Christian Æra.

"Copernici præfationi, per-" mittuntur."

" preface of Copernicus." Then follow the prescribed emendations].

Dat. Romæ 1620.

Given at Rome 1620.

Fr. Franciscus Magdalenus Br. Francis Magdalene Cap-Cappiferreus Ordinis Præd. Sacræ Congreg. Indicis Secretarius.

piferreus of the Order of Preachers, Secretary of the Sacred Congregation of the Index.

John Kepler, who was a native of Wirtenburg, and mathematician to the emperors Rodolphus, Matthias, and Ferdinand, had, in 1609, written a treatife upon the course of the planet In 1617, he published three books on the doctrine of the sphere, and, in 1621 and 1622, he published his theory of the planets in three books, and one book of the motion of the eighth sphere. His celebrated epitome of the Copernican system, which he illustrated and improved, was composed of these feven books [d].

3520.

Philip Lansberg, a great astronomer, native of Zealand, and minister of the reformed religion there, having undertaken the defence of the Copernican system, and for that end written his commentaries upon the diurnal and annual motion of the earth in Dutch, they were in this year published at Middleburg in Latin by Martin Hortensius of Delft.

-3031.

Libertus Fromondus, professor of Theology at Lovain, published at Antwerp a work, entitled, Anti-Aristarchus, seu, De Orbe terræ immobili, adversus Philippum Lansbergium. Anti-Aristarchus, or, Of the immovable Orb of the earth, against Philip Lansberg.

Same year.

John Baptist Morin, a physician, and king's professor of the mathematics at Paris, published a book, entitled, Famosi pro-

[[]d] This epitome is inferted in the ed in 1667, by command of pope Alexcatalogue of prohibited books publish- ander the Seventh.

blematis de telluris motu vel quiete hactenus optata folutio. The long defired solution of the famous problem concerning the motion or _ rest of the earth; in which he contended for the latter against Copernicus and his followers.

Chrillian

1632i

1633.

S E C T. XVIII.

\(\tag{ALIL}\overline{\pi}0\) published at Florence his dialogue on the T Ptolemaic and Copernican systems, wherein he endeavored to maintain the latter.

He was cited to appear at Rome before the holy office of the inquisition, by whose decree he was sentenced to be imprisoned during pleasure; whereupon he abjured.

The decree against Galilæo is not to be found among the decrees published at Rome; but a copy of it, containing the particulars of all the proceedings against him, with his abjuration, having been published at Bologna by John Baptist Riccioli of Ferrara, professor of Philosophy, Theology, and Astronomy, in his New Almagest, we shall from thence insert the whole here verbatim.

Sententia in Galilæum, et Ab- The Sentence against Galilæo, juratio ejusdem. and his Abjuration.

Hierofolymæ, Borgia Frater Felix Centimis Tituli S. Anastasiæ, dictus de Asculo Guidus Tituli S. Mariæ Populi, Bentivolus

Frater Desiderius Scaglia Tituli S. Caroli, dictus de Cre-212022a

Frater Antonius Barberinus, dictus S. Onufrii Laudivius Zacchia Tituli S.

Nos Gaspar Tituli S. Crucis We Gaspar Borgia, &c.by the mercy of God Cardinals of the Holy Roman Church, Inquisitors General in the whole Christian Commonwealth against heretical pravity by the Holy See Apostolical specially deputed.

Petri in Vinculis, dictus S. Sixti

Berlingerius Tituli S. Augustini, Gypsius

Fabricius S. Laurentii in pane et perna Verospius, dictus Presbyter

Franciscus S. Laurentii in Damaso Barberinus, et

Martius S. Mariæ Novæ Ginettus, Diaconi, per misericordiam Dei Sanctæ Rom. Eccl. Cardinales in universa republica Christiana contra hæreticam pravitatem Inquisitores Generales à S. Sede Apostolica specialiter deputati.

"CUM tu Galilæe, fili quondam Vincentii Ga"lilæi Florentini, ætatis tuæ
"annorum 70, denunciatus
"fueris anno 1615 in hoc S.
"Officio, quòd teneres tan"quam veram, falfam doc"trinam à multis traditam;
"folem videlicet effe in centro
"mundi et immobilem, et
"terram moveri motu ctiam
"diurno: item quòd haberes
"quofdam discipulos, quos
"docebas eandem doctrinam:

"WHEREAS you Galilæo, fon of the late "Vincent Galilæo a Floren-" tine, [now] in the 70th year " of your age, was fummoned " in the year 1615 before this "Holy Office, for holding as "true a salse doctrine deli-" vered by many; to wit, that "the fun is in the centre of "the world and immoveable, " and that the earth is moved " with a diurnal motion: also " for having certain scholars, " whom you taught the same "doctrine: also for keeping "item

"item quòd circa eandem " fervares correspondentiam " cum quibusdam Germaniæ " mathematicis: item quòd " in lucem dediffes quasdem " epistolas inscriptas de ma-" culis Solaribus, in quibus ex-" plicabas eandem doctrimam, "tanquam veram: et quòd " objectionibus quæ identidem " fiebant contra te, sumptis ex " Sacra Scriptura, responde-" bas gloffando dictam Scrip-"turam juxta tuum fenfum; " cumque deinceps coram ex-" hibitum fuerit exemplar " fcriptionis in forma epistolæ, " quæ perhibebatur à te scrip-" ta ad quemdam discipulum " olim tuum, et in ea secta-"tus Copernici hypotheses " contineas nonnullas propo-" fitiones contra verum fen-" fum et auctoritatem Sacræ " Scripturæ."

"Volens proinde hoc S.
"Tribunal prospicere incon"venientibus ac dannis quæ
"hinc proveniebant et in"crebrescebant, in perniciem
"Sanctæ Fidei: De mandato
"Domini N. et eminentissi"morum DD. Cardinalium
"hujus supremæ ac universalis

"a correspondence concern-"ing the same with certain. "mathematicians of Germa-"ny: also for publishing cer-"tain epistles inscribed of the "Solar spots, in which you " explained the same doctrine "as true: and for answering "the objections made against "you, taken out of Holy "Scripture, by gloffing faid "Scripture according to your "fense; and whereas after-" wards a copy was exhibited " of a writing in form of an "epiftle, which was reported " to have been written by you "to a person formerly your " fcholar, and in it following "the hypothesis of Copernicus "you comprize fome propo-" fitions against the true sense " and authority of Sacred "Scripture."

"The Holy Tribunal there"fore willing to provide a"gainst the inconveniences
"and damages, which issued
"thence and grew frequent,
"to the destruction of Holy
"Faith: By command of our
"Lord [b] and of the most
"eminent Lords Cardinals of
"this supreme and universal

[b] Meaning the pope.

" Inquisitionis, a Qualificato-" ribus Theologis qualificatæ

" fuerunt duæ propositiones

" de stabilitate solis et de mo-

" tu terræ, ut infrà."

Solem esse in centro mundi, et immobilem motu locali, est propositio absurda, et falsa in philosophia, et formaliter hæretica; quia est expresse contraria Sacræ Scripturæ. Terram non esse centrum mundi, nec immobilem, sed moveri motu etiam diurno, est item propositio absurda et falsa in philosophia, et, Theologicè considerata, ad minus erronea in side.

"Sed cùm placeret interim tum nobis tecum benignè procedere, decretum fuit in S. Congregatione, habita co- ràm D. N. die 25 Februarii anni 1616, ut eminentissimus D. Card. Bellarminus tibi injungeret, ut omnino recederes à prædicta falsa doctrina; et recusanti tibi,

"Inquifition, by the Divines "Qualificators two proposi"tions were qualified con"cerning the stability of the
fun and the motion of the
earth, as beneath,

That the fun is in the centre of the world, and immoveable by local motion, is a proposition absurd and false in philosophy, and formally hæretical; because it is expressly contrary to Sacred Scripture.

That the earth is not the centreof the world, nor immoveable, but moved by a diurnal motion, is likewife an abfurd proposition, and false in philosophy, and theologically considered, at least erroneous in faith.

"But as it was then our

" pleasure to proceed mildly

"with you, it was decreed in the Holy Congregation, held before Our Lord on the 25th day of February, of the year 1616, that the most eminent Lord Cardinal Bel-larmine should enjoin you, to recede entirely from the aforesaid salse doctrine; and upon your resulal, you a cons-

Ch liften

" a commissario S. Officii præ-"ciperetur ut desereres dic-" tam doctrinam, neve illam " posses alios docere, nec de-"fendere; nec de illa trac-" tare; cui præcepto fi non " acquiesceres, conjecere in " carcerem: et ad executio-" nem ejusdem decreti, die se-" quenti in palatio, coram "fupradicto Eminentiss. D. " Cardinali Bellarmino, post-" quam ab eodem D. Cardi-" nali benignè admonitus fu-" eras tibi à D. Commissario "S. Officii eo tempore fun-" gente, præceptum fuit, præ-" fentibus notario et testibus, " ut omnino desisteres à dicta "falsa opinione; et ut in " posterum non liceret tibi "eam defendere, aut docere "quovis modo, neque voce, " neque scriptis; cumque pro-" misisses obedientiam, dimis-" fus fuifti.

"Et ut prorsus tolleretur tam perniciosa doctrina, neque ulterius serperet in grave detrimentum Catholicæ veritatis, emanavit decretum

"flould be charged by the "Commissary of the Holy-" Office, to forfake the faid "doctrine, and not teach it "others, nor defend it, nor " treat of it, to which precept "if you should not submit, "you were to be cast into " prison: and for the execu-"tion of faid Decree, on the "day following in the palace, " before the above faid most " Eminent Lord Card. Bel-" larmine, after you had been " mildly admonished by the " faid Lord Cardinal: you "were enjoined by the Lord "Commissary of the Holy " Office for that time, in pre-" fence of a notary and wit-" neffes, to defift entirely from " the faid false opinion; and " that for the future it should " not be lawful for you to de-" fend it, or in any wife to " teach it, neither by discourse "nor writings; and upon " your promising obedience, " you were difinissed. " And that so pernicious a

"doctrine might be wholly "taken away, and not spread farther to the grievous de- triment of Catholic truth, "a Decree issued from the L 2 " à Sa-

" à Sacra Congregatione Indi-"cis, quo fuerunt prohibiti " libri qui tractant de hujuf-" modi doctrina; et ea de-" clarata fuit falsa, et omnino " contraria Sacræ ac Divinæ "Scripturæ. Cùmque postre-" mò comparuisset hic liber, "Florentiæ editus anno proxi-" mè præterito, cujus inferip-"tio oftendebat te illius au-"thorem esse, siquidem ti-" tulus erat Dialogo di Gali-" læo Galilæi delle duo massime " Sisteme del Mondo, Tolomaico " è Copernicano, cum fimul "cognovisset Sacra Congre-"gatio ex impressione præ-"dicti libri convalescere in " dies magis magisque falsam " opinionem de motu terræ "et stabilitate solis, fuit præ-" dictus liber diligenter con-"fideratus, et in ipfo depre-" hensa est aperte transgressio " prædicti præcepti, quod tibi " intimatum fuerat: cò quòd "tu in eodem libro defendif-" fes prædictam opinionem " jam damnatam, et coram te " pro tali declaratam: fiqui-"dem in dicto libro variis

"Sacred Congregation of the " Index, by which were pro-" hibited the books that treat " of fuch doctrine; and it was " declared false, and altoge-" ther contrary to Sacred and " Divine Scripture. "whereas finally a book ap-" peared here, published at "Florence in the year last " preceding, whose inscription " shewed that you were its author, for as much as the " title was *Dialogo di Galilæ*o "Galilæi delle duo massims " Sisteme del Mondo, Tolomaico "è Copernicano, as foon as the "Sacred Congregation knew " from the impression of the " aforefaid book, that the false "opinion of the motion of " the earth and stability of the " fun daily recovered strength " more and more, the afore-"faid book was diligently " confidered, and in it was " found an open transgression " of the aforefaid injunction, " which had been fignified to "you: because that you in " the faid book had defended " the aforefaid opinion already " condemned, and before you " declared to be fuch. For "as much as in faid book "circum"circumvolutionibus fatagis
"ut perfuadeas eam à te re"linqui tanquam indecifam et
"expresse probabilem, qui
pariter est gravissimus error,
cum nullo modo probabilis
"esse possit opinio, quæ jam
"declarata ac definita suerit
"contraria Scripturæ divinæ.

" Qua propter de nostro " mandato evocatus es ad hoc "S. Officium, in quo exa-" minatus cum juramento ag-" novisti dictum librum tan-" quam à te conscriptum, et "typis commissum. " confessus es decem aut duo-" decim circiter abhine annis, " postquam tibi factum fuerat " præceptum ut supra, cæptum " à te scribi dictum librum. " Item quòd petiisti licentiam " illum evulgandi, non figni-" ficans tamen illis qui tibi " talem facultatem dederunt, "tibi præceptum fuisse ne te-" neres, defenderes, docerefve " quovis modo talem doc-

"Confessus es pariter, scripturam prædicti libri pluribus in locis ita compositam

"by various circumvolutions" you endeavor to perfuade that it is left by you as untedecided, yet expressly probable, which is likewise a most grievous error, as that can by no means be a probable opinion, which hath already been declared and defined to be contrary to divine Scripture.

"Wherefore by our man-" date you have been called " unto this Holy Office, in " which being examined on " oath you have acknowledged " the faid book as written by " you, and committed to the " press. Also you have con-"fessed that about ten or "twelve years ago, after you " had been enjoined as above, " you began to write the faid "book. Also that you re-" quested licence to publish it, "but without fignifying to "them who gave you that "licence, that you had been " enjoined not to hold, de-" fend, or teach in any wife " fuch doctrine.

"You have likewise con"fessed that the writing of the
"aforesaid book is in many
"places so composed, that the
"esse

" trinam.

" esse ut lector existimare pos-" fit argumenta, ducta pro " parte falsa, esse ita enunci-" ata, ut potius præ illorum " efficacia possent adstringere " intellectum quam facile dif-" folvi, excusans te quod in-" curreris in errorem adeò (ut " dixisti) alienum à tua inten-"tione, eò quòd scripseris in " formam dialogi, et propter " naturalem complacentiam, " quam quilibet habet de pro-" priis fubtilitatibus, et in of-" tendendo fe magis argutum " quam fint communiter ho-" mines in inveniendo etiam ad " favorem propositionum salsa-" rum ingeniosos et apparentis " probabilitatis discursus.

"Et cùm adfignatus tibi fuisset terminus conveniens ad tui desensionem saciendam, protulisti testificationem ex authographo Eminentissimi D. Card. Bellarmini, à te, ut dicebas, procuratam ut te desenderes a calumniis inimicorum tugorum, qui dictitabant te abijurasse et punitum suisse a S. Ossicio: in qua testificatione dicitur te non abjurasse.

" reader may think the argu-"ments, used for the false " part, are fo delivered, that "by their efficacy they may " rather bind the intellect than " be cafily diffolved, excufing "yourself for running into "an error fo foreign, as you " have faid, to your intention, " by having wrote in form of " a dialogue, and through the " natural complacency which " every one hath in his own "fubtilties, and in shewing " himself to be more shrewd "than men commonly are "in devifing ingenious dif-"courses, and of apparent " probability, in favor of false

"And when a convenient term had been assigned you for making your defence, you produced a testification in the handwriting of the most Eminent Lord Cardi-

" propositions.

" nal Bellarmine, procured, as "you faid, by you for your defence against the caluni-

"nies of your enemies, who faid that you had abjured

"and been punished by the

"Holy Office; in which testification it is said you

"had not abjured nor been

"fe,

" fe, neque punitum fuisse, " fed tantummodo denuntia-" tam tibi fuisse declarati-" onem factam à Domino " nostro, et promulgatam à S. "Congregatione Indicis, in " qua continetur doctrinam de "motu terræ et stabilitate " folis contrariam effe Sacris "Scripturis, ideoque defendi "non posse nec teneri. Quare " cùm ibi mentio non fiat dua-" rum particularum præcepti, "videlicet dosere, et quovis " modo, credendum est in de-" cursu quatuordecim aut sex-" decim annorum eas tibi è "memoria excidisse, et ob " hanc ipsam causam te ta-" cuisie præceptum quando " petiisti facultatem librum " typis mandandi, et hoc à te "dici non ad excusandum er-" rorem, fed ut adscriberetur " vanæ ambitioni potius quam " malitiæ. Sed hæc ipfa tef-" tificatio producta ad tui de-" fensionem tuam causam ma-" gis aggravavit, fiquidem in

"punished, but only that "the declaration made by our _ " Lord had been denounced to "you, and promulgated by "the Sacred Congregation "of the Index, in which is " contained that the doctrine " of the motion of the earth "and stability of the fun " is contrary to Sacred Scrip-"tures, and therefore can-"not be defended nor held." "Wherefore as mention is "not there made of two " particles of the precept, to "wit [docere, et quovis modo] "to teach, and by any means, "it is to be believed, that "in the course of fourteen "or fixteen years they had "flipt out of your memo-"ry, and that for this very "caufe you had been filent "as to the precept, when "you requested leave to "print the book, and that "this was faid by you not "to excuse the error, but "that it might be ascribed "to vain ambition rather " than malice. But this very "testification produced for " your defence, hath more " aggravated your cause, for

" ea dicitur prædictam opini" nem esse contrariam Sacræ
" Scripturæ, et tamen ausus es
" de illa tractare, eam desen" dere, et persuadere tanquam
" probabilem: neque tibi sus" fragatur facultas à te arti" ficiosè et callidè extorta,
" cùm non manifestaveris præ" ceptum tibi impositum.
" Cum vero nobis videre-

"Cum vero nobis videre-" tur non esse à te integram " veritatem pronunciatam cir-" ca tuam intentionem; indi-" cavimus necesse esse venire "ad rigorofum examen tui, " in quo (absque præjudicio " aliquo eorum quæ tu con-" fessus es, et quæ contra te " deducta funt fuprà circa " dictam tuam intentionem) " respondisti Catholicè. Qua-" propter visis et maturè con-"fideratis meritis istius tuæ "causæ, unà cum supradic-"tis tuis confessionibus et ex-"cusationibus, et quibusvis " aliis rebus de jure videndis " et considerandis, devenimus

"as much as it is faid therein that the aforefaid opinion is contrary to Sacred Scrip"ture, and nevertheless you have dared to treat of it, to defend it, and to per"fuade it as probable; nor does the licence artfully and craftily extorted by you favor you, as you did not manifest the precept en-

" joined you.

" Now as it appeared to "us that the whole truth " had not been pronounced "by you concerning your " intention, we have shewn "that it was necessary to " come to a rigorous exami-" nation of you, in which "(without any prejudice of "those things which you "have confessed, and which " are above deduced against "you concerning your faid " intention) you have answer-"ed catholically. Where-"fore the merits of this " your cause being seen and " maturely confidered, toge-"ther with your abovemen-"tioned confessions and ex-" cufes, and all other things " of right to be feen and " confidered, we have come

" contra

" contra te ad infra scriptam

" definitivam fententiam.

"Invocato igitur fanctiffimo " nomine Domini nostri Jesu

"CHRISTI, et ipfius gloriofif-

" fimæ matris semper virginis

"Mariæ, per hanc " tram definitivam fententiam,

" quam fedendo pro tribunali,

" de confilio et judicio Reve-

" rendorum magistrorum Sa-

" cræ Theologiæ, et Juris utri-

" ulque Doctorum, nostrorum

" confultorum, proferimus in

" his scriptis circa causam et

" causas coram nobis contro-

" versas inter magnificum Ca-

" rolum Sincerum, utriusque

" Juris Doctorem, S. hujus

" Officii Fifcalem procura-

"torem ex una parte, et te

"Galilæum Galilæi reum hic

" de præsenti processionali

" scriptura inquisitum, exami-

" natum et confessum ut su-

" prà ex altera, dicimus, judi-

" camus et declaramus te Ga-

" lilæum fupradictum ob ea

" quæ deducta funt in pro-

" cessu scripturæ, et quæ tu

" confessus es ut suprà, te ip-

" to the under written de-

"finitive fentence against -

" you.

"Having thereupon in-" voked the most holy name

" of our Lord Jesus Christ,

"and of his most glorious "mother the ever virgin

" MARY, by this our definitive

"fentence, which fitting in

"the tribunal, by the advice

" and opinion of the Reverend

" mafters of facred Theology,

" and of the Doctors of both

"Laws, our counfellors, we

"have produced in these

" writings concerning the " cause and causes before us

"controverted between the

" magnificent Charles Sin-

" cere, Doctor of both Laws,

"Fiscal procurator of this

" Holy Office, on the one

" part, and you Galilæo Gali-"læi here guilty concern-

"ing the prefent processional

" writing fearched, examined

"and confessed as above on

"the other, we fay, judge

" and declare that you Gali-

" læo abovefaid for thofe " things which are deduced

"in process of writing, and

"which you have confessed

"as above, have rendered \mathbf{M} " finn Christian

"fum reddidisse huic S. Of-" ficio vehementer suspectum " de hæresi, hocest, quod cre-" dideris et tenueris doctrinam " falsam et contrariam Sacris " ac Divinis Scripturis, folem "videlicet esse centrum orbis "terræ, et eum non moveri "ab oriente ad occidentem, " et terram moveri, nec esse " centrum mundi, et posse te-" neri ac defendi tanquam " probabilem opinionem ali-"quam, postquam declarata " ac definita fuerit contraria "Sacræ Scripturæ; et conse-" quenter te incurrisse omnes "censuras et pænas à Sacris "Canonibus et aliis Consti-"tutionibus generalibus et " particularibus contra hujuf-" modi delinquentes statutis et " promulgatis: A quibus pla-" cet nobis ut absolvaris, dum-" modo priùs corde syncero " et fide non ficta coram no-" bis abjures, maledicas, et de-" testeris supradictos errores et "hæreses, et quemcunque s' alium errorem et hærefim " contrariam Catholicæ

"you vehemently suspected "by this Holy Office of "herefy, that is, that you "have believed and held a "doctrine false and contrary " to Sacred and Divine Scrip-" tures, to wit, that the fun " is the centre of the orbit " of the earth, and that it " is not moved from east to "west, and that the earth "is moved, and is not the "centre of the world; and "that it may be held and "defended as a probable " opinion, after it hath been "declared and defined con-"trary to Sacred Scripture; "and confequently that you "have incurred all the cen-"fures and punishments by "the facred Canons and " other constitutions general " and particular against de-"linquents of this kind ap-" pointed and promulgated. "From which it feemeth "good unto us that you be-" absolved, provided you first " with fincere heart and faith. "unfeigned before us ab-"jure, curse, and detest the "abovefaid errors and here-"fies, and every other error and herefy contrary to Aposto-

Christian

"Apostolicæ Romanæ eccle-"siæ, ea formula quæ tibi a "nobis exhibetur.

" Ne autem tuus iste gravis " et perniciosus error ac trans-" gressio remaneat omnino " impunitus, et tu imposterum " cautior evadas, et sis in ex-" emplum aliis ut abstineant " ab hujusmodi delictis, decer-" nimus ut per publicum edic-"tum prohibeatur liber dialo-" gorum Galilæi Galilæi, te " autem damnamus ad forma-" lem carcerem hujus S. Of-"ficii ad tempus arbitrio "nostro limitandum, et ti-"tulo pœnitentiæ falutaris " præcipimus, ut tribus annis "futuris recites femel in heb-" domada feptem pfalmos pæ-" nitentiales: refervantes no-"bis potestatem moderandi, " mutandi, aut tollendi omni-" no vel ex parte supradictas " pænas et pænitentias.

"Et ita dicimus, pronun-"ciamus, ac per fententiam declaramus, ftatuimus, damnamus, et refervamus hoc et omni alio meliori modo et "the Catholic and Apostolic

"Roman Church, in the _

" form that shall be exhi-

" bited unto you by us. "And that this your " grievous and pernicious er-" ror and transgression may "not remain altogether un-"punished, and that you "henceforth may become " more cautious, and be an "example to others to ab-" stain from such crimes, we "decree that the book of " Dialogues of Galilæo Gali-" læi be prohibited by public " edict, and we condemn " you to the formal prison " of this Holy Office for a "time to be limited by our "will, and as a falutary "penance enjoin, that for "three years enfuing you "recite once in a week the " feven penitential pfalms: re-" ferving to ourfelves the pow-" er of moderating, changing, " or taking away entirely or

"ments and penances.

"And thus we fay, pro"nounce, and by fentence
"declare, appoint, condemn,
"and referve in this and
"every other better manner
M 2 "for-

" in part the abovefaid punish-

Æra. " mus ac debemus."

Christian "formula, qua de jure possu- "and form, by which we " may and ought of right."

> Ita pronunciamus nos Cardi- Thus we the Cardinals undernales infrascripti:

written pronounce:

F. Cardinalis de Asculo.

G. Cardinalis Bentivolus.

F. Cardinalis de Cremona.

Fr. Antonius Cardinalis S. Onuphrii.

B. Cardinalis Gypfius.

F. Cardinalis Verospius.

M. Cardinalis Ginettus.

Abjuratio Galilæi.

" E GO Galilæus Galilæi, filius quondam Vin-" centii Galilæi, Florentinus, " ætatis meæ annorum LXX, " constitutus personaliter in " judicio, et genuslexus co-" ram vobis Eminentissimis " et Reverendissimis Domi-" nis Cardinalibus universæ " Christianæ reipublicæ con-" tra hæreticam pravitatem " generalibus Inquisitoribus, "habens ante oculos meos " facro-fancta Evangelia, quæ " tango propriis manibus, juro " me semper credidisse et nunc " credere, et, Deo adjuvante, in " posterum crediturum omne " id, quod tenet, prædicat et The Abjuration of Galilæo.

" T Galilæo Galilæi of Flo-" rence, fon of the late " Vincent Galilæo, aged LXX "years, being placed per-"fonally in judgment, and "on my knees before you "most Eminent and most "Reverend Lords Cardinals, " of the universal Christian "commonwealth general in-" quifitors against hæretical " pravity, having before my " eyes the most holy Gospels, "which I touch with my " own hands, do fwear that "I have ever believed, and "do now believe, and, with "God's help, will hereafter "believe all that the Holy " docet

Christian

" docet S. Catholica et Aposto-" lica Romana ecclefia. " quia ab hoc S. Officio, eò "quod postquam mihi cum " præcepto fuerat ab eodem " juridice injunctum, ut om-" nino deserrem falsam opi-" nionem quæ tenet folem esse " centrum Mundi, et immo-" bilem, et terram non esse " centrum, ac moveri, nec pof-"fem tenere, defendere aut " docere quovis modo vel scrip-" to prædictam falsam doctri-" nam; et postquam mihi no-"tificatum fuerat prædictam " doctrinam repugnantem effe " Sacræ Scripturæ; fcripfi et " typis mandavi librum in quo " eandem doctrinam jam dam-" natam tracto, et adduco ra-"tiones cum magna efficacia " in favorem ipfius, non af-" ferendo ullam folutionem; " idcirco judicatus sum vehe-" menter suspectus de hæresi, " videlicet quòd tenuerim et " crediderim, folem effe cen-" trum Mundi, et immobilem, " et terram non esse centrum, " ac moveri.

"Catholic and Apostolic "Roman church holdeth, -" preacheth, and teacheth. "But feeing that by this "Holy Office, because after "having been with precept " juridically injoined by the "fame utterly to relinquish "the false opinion which "holdeth that the fun is the " centre of the world and "immoveable, and that the " earth is not the centre, and is " moved, and not to hold or " defend in any wife or by " writing the aforesaid false "doctrine, and after it had "been notified to me that " the aforesaid false doctrine is " repugnant to Sacred Scrip-"ture, I have written and "caused to be imprinted a "book in which I treat of " the faid doctrine now con-"demned, and bring reasons "with great efficacy in favor "thereof, not giving any fo-"lution; I am therefore " deemed vehemently suspect-"ed of herefy, to wit because "I have held and believed "that the fun is the centre of " the world and immoveable, "and that the earth is not " the centre, and is moved.

" Idcirco volens ego eximere " à mentibus Eminentiarum "Vestrarum et cujuscunque " Christiani Catholici vehe-" mentem hanc fuspicionem " adversum me jure concep-"tam, corde fincero et fide " non ficta abjuro maledico et " detestor supradictos errores " et hæreses, et generaliter " quemcunque alium errorem " et sectam contrariam supra-" dicta S. Ecclesia; et juro me " in posterum nunquam am-" plius dicturum, aut affertu-"rum voce aut scripto quid-" quam propter quod possit " haberi de me similis suspicio; " fed fi cognovero aliquem " hæreticum aut suspectum de "hæresi, denuntiaturum il-" lum huic S. Officio, aut In-" quisitori et Ordinario loci "in quo fuero. Juro insu-" per ac promitto me imple-"turum et observaturum in-" tegre omnes pænitentias quæ " mihi impositæ sunt, aut im-" ponentur ab hoc S. Officio. " Quòd fi contingat me ali-" quibus ex dictis meis pro-" missionibus, protestationibus " et juramentis (quod Deus " avertat) contraire, subjicio " me omnibus pænis ac fup-

"I therefore, willing to " take from the minds of your "Eminencies and of every " Christian Catholic this ve-" hement fuspicion justly con-" ceived against me, with fin-" cere heart and faith un-" feigned do abjure curse and " detest the abovesaid errors " and herefies, and generally " every other error and fect "contrary to the aforesaid "holy church; and do fwear " that I will never more here-"after fay or affert by speech "or writing any thing for " which like fuspicion may "be had of me; but if I "fhall know any heretic or " person suspected of heresy "I will report him to this " holy office, or to the Inqui-"fitor and Ordinary of the " place in which I shall be. " I do fwear moreover and " promife that I will fulfil " and observe entirely all the " penances which have been or shall be imposed on me " by this Holy Office. And if "it shall happen that I act " contrary to any of my faid " promifes protestations and "oaths (which God forbid) I " fubject myfelf to all pains " pliciis,

" pliciis, quæ a Sacris Cano" nibus et aliis constitutioni" bus generalibus et particu-

" laribus contra hujusmodi de-

" linquentes statuta et pro" mulgata fuerunt : sic me

" Deus adjuvet et Sancta ip-" fius Evangelia, quæ tango

" propriis manibus.

"Ego Galilæus Galilæi "fupradictus, juravi, promisi "et me obligavi ut supra, et "in horum sidem mea pro-"pria manu subscripsi præ-"fenti chirographo meæ ab-"jurationis, et recitavi de ver-"bo ad verbum Romæ in "conventu Minervæ hac die "22 Junii anni 1633."

Ego Galilæus Galilæi abjuravi ut fupra manu propria. "and punishments appointed
and promulgated by the Sacred Canons and other
general and particular confitutions against such delinquents. So help me God
and the holy Gospels, which
I touch with my own

" hands.
" I Galilæo Galilæi above-

" faid have abjured, fworn, promifed, and obliged my-

" felf as above, and in affur-" ance hereof have subscribed

"with my own hand to this

" present writing of my ab" juration, and have recited

"[it] word by word at "Rome in the convent of

"Minerva this 22d day of

"June, of the year 1633."

I Galilæo Galilæi have abjured as above with my own hand.

S E C T. XIX.

JAMES, fon of Philip, Lansberg, doctor of physic, published at Middleburg his defence of his father's commentaries, against Fromondus and Morin.

The dialogue of *Galilæo* upon the *Ptolemaie* and *Copernican* fystems was condemned and prohibited by the following decree of the facred congregation of the Index.

Decretum

1634.

Decretum XXXVIII.

Sacræ Congregationis Indicis.

" C ACRA Indicis Congre-"O gatio Eminentissimorum " et Reverendiss. DD. S. R. E. " Cardinalium infra scriptos " libros damnat et prohibet, " mandans omnibus et fingulis " cujuscumque gradus et con-" ditionis, sub pænis in Indice " librorum prohibitorum con-" tentis, ne ullus in posterum " eos imprimere, legere, aut " quovis modo apud se retinere " audeat; et siquis aliquos il-" lorum habuerit, ut statim " omnes à præsentis Decreti " notitia locorum Ordinariis " feu Inquisitoribus consignet. " Libri autem sunt,

"Dialogo di Galileo Gali" lei, doue ne i congressi di
" quattro giornate si discorre
" sopra i dui Massimi Sistemi
" del Monde, Tolemaico, e
" Copernicano.

" In quorum fidem manu et figillo Eminentissimi et Re-

Decree XXXVIII.

Of the Sacred Congregation of the Index.

" THE Sacred Congregation of the most Emi-"nent and most Reverend " Lords Cardinals of the Holy " Roman church condemn-" eth and prohibiteth the un-" derwritten books, command-" ing all and fingular persons " of whatsoever degree and " condition, under the penal-" ties contained in the Index " of books prohibited, that no " one henceforth prefume to imprint, read, or in any wife " retain them with him; and " if any one shall have any of " them, that he immediately " on notice of the prefent De-" cree deliver them to the Or-"dinaries or Inquifitors of the " places. Now the books are,

"A Dialogue of Galileo
"Galilei, wherein in confe"rences had on four days the
"two principal Systems of the
"World, the Ptolemaic and
"Copernican, are discussed.

"In affurance whereof the prefent Decree was figned and confirmed with the verendiffimi

Ch-iftian

" verendissimi Domini Cardi-

" nalis Pii Sacræ Congregati-

" onis præfecti, præfens Decre-

" tum fignatum et munitum

" fuit Romæ die 23 Augusti

" 1634.

C. Episcopus Portuen, Cardinalis Pius.

Locus + Sigilli.

Fr. Jo. Baptista Marinus Ord. Præd. S. C. Secr. " hand and feal of the most

"Eminent and most Reve-_

" rend Lord Cardinal Pius

" prefect of the Sacred Con-

" gregation, at Rome the 23d

" day of August 1634.

C. Bishop of Porto, Cardinal Pius.

Place + of the Seal.

Br. John Baptist Marinus of the Order of Preachers, Secretary of the Sacred Congregation.

Fromondus published at Antwerp his replication, entitled, Same year. Vesta, sive Anti-Aristarchi vindex, contra Jacobum Lansbergium Phil. F. et Copernicanos. Vesta, or a vindication of Anti-Aristarchus against James Lansberg son of Philip, and the Copernicans. Mons. Baillet, who supposes Fromondus was no farther concerned in this controversy, in his Jugement des Savans, says "he was certainly one of the most able among "the partisans of the system of Ptolemy; but the quality of divinity professor at Lovain, that is to say, of an university "entirely subject to the inquisition, took from him perhaps "the liberty of examining the prejudice conceived by his "masters upon this subject."

In this year Morin, whose pretended solution had been attacked by Bullialdus and others, as well as by James Lanfberg, published his Responsio pro telluris quiete. An Answer in defence of the rest of the earth — The controversy continuing, in 1642, he published a treatise, entitled, Tycho Braheus in Philolaum pro telluris quiete, Tycho Brahe upon Philolaus in defence of the rest of the earth. In 1642, his countryman the celebrated Gassendi published two letters which he had written

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to Peter du Puy, de motu impresso à motore translato; of the motion transferred from the moving body, and impressed on the body moved; wherein he enforced the reasons of the Copernicans, and shewed the fallacy of several arguments urged by their adversaries; at which Morin taking offence, in 1643, wrote against him Alæ telluris fractæ; The wings of the earth In the same year Gassendi refuted this piece without passion, but with great strength of reason. This work he offered to suppress on Morin's being reconciled to him; but, in 1649, Neuré, one of his friends, who together with Bernier, another of them, had entered into this dispute, which became intermingled with other philosophical matters, published it with a violent preface. Gaffendi made his excuses to Morin, protesting that he knew nothing of this impression; but Morin published his letter, and from time to time transgressing. the rules of decency, which Gaffendi had observed, he declined all further concern with fuch an adversary — It is to be remarked that Gaffendi, who was an ecclefiastic, moved by real doubt, or a defire to keep peace with the court of Rome, proceeded in such a manner, that Riccioli, its great advocate, gave him the following commendation. "But we have also a " remarkable instance of prudence and moderation in Peter "Gassendi, who having in the second epistle de motu impresso " à motore translato, explained many arguments for the earth's "motion, and answered not a few of those usually alledged " against it, at first kept himself within the limits of a meer "hypothesis. Afterwards, being in doubt, subscribed to the " placits of the facred congregation; for fo he concludes that 1640 letter, written on the ides of December in the year 1640 " to Peter du Puy," You do not require me to repeat that what I did was not to affert the earth's motion, but through love of truth to hint that its rest should be established by stronger reason. "And a little after"—My inclination is to revere that that by which some cardinals are said to have approved the earth's reft. For although the Copernicans hold that the places

places of Sacred Scripture which attribute station or rest to the Christian earth, and motion to the fun, are either to be explained, as the speak, by the appearance itself &c; nevertheless as those places ar otherwife explained by men whose authority, it is well known, is great in the church, I am therefore on their side, and on the occasion blush not to make my understanding captive; not the I do therefore imagine it to be an article of faith; for neithe cas far as I know) is that afferted by them, or promulgate and received by the universal church; but that their judges is to be held a prejudgment, which cannot but be of the greatest war ment with the faithful.

Riccioli published his New Almagest, comprizing the old and new astronomy. In the 3d section of the 9th book he treats of the fystems of the world which suppose the immobility of the earth; and in the 4th section he treats of the fystem that supposeth the carth to be moved. cuffed these various systems, in order to overthrow Copernicism, in the 4cth chapter he mentions as its adversaries Tycho, Taffonus, Marcennus, Gassendi, Scheiner, Delphinus, Kircher, Lipsus, Tellez, Serarius, Tanner, Fromondus, Acarifus, Inchofer, Polaccus, Pineda, and Lorinus, omitting Morin and Tacquet, though the latter as well as himself was a Jesuit, a great mathematician, and a professed adversary of Copernicism; forbearing to give a like collection of the authors that had appeared in favor of Then having declared that he dared not add to or take any thing from the centure passed upon Copernicism by the facred congregation of the cardinals, he subscribes to it as pronounced most prudently, and for the justest causes; and having fet forth at large the 14th and 21st decrees, aforementioned, together with the fentence against Galilæo, he observes that without cause some censure them, or do not as yet acquiesce therein - In justice to Riccioli it is to be noted that he avoided those sharp reproaches which were cast on the Copernicans by many other of their adversaries, who continued to treat them as dangerous enemies of revelation, notwith-

standing they defended themselves by observing that divine and moral truths, and not the principles of astronomy, were to be sought for in the Scriptures, and that natural things, when there mentioned, were spoken of according to their appearance, and the common understanding of mankind, who were not intended to be instructed in natural philosophy by revelation, but in the knowledge of the true God, and the necessity of their obedience to his laws.

S E C T. XX.

HE preceding decrees, and the arguments for the Ptolemaic system proving insufficient to prevent the progress of Copernicism, all books treating of the mobility of the earth and immobility of the fun were prohibited. ther this prohibition was first made by the pope, the holy Inquifition, or the facred congregation of the Index, or when made, I cannot afcertain [d]. Pope Alexander the Seventh, in his bull, dated the 5th day of March 1664, declares that after the Index of prohibited books published by pope Clement the Eighth, according to the form of another Index which had come forth by authority of the council of Trent, many books had been prohibited by the fuccessors of pope Clement, and by the congregation of the cardinals of the Index, and their authors condemned; but no regular and distinct catalogue, comprizing these books and their authors, had been made by public authority; wherefore, pursuant to his decree, a new general Index, containing the books prohibited after the last Index of Clement, and also those described in the catalogues aforementioned, having been accurately composed and revised, he thereby approved and confirmed the same. This Index, with the bull prefixed, was published in the same

he fhould by his decree make this general prohibition.

[[]d] The master of the facred palace exercises a power of prohibiting books; but it appears to me improbable that

year, together with the *Tridentine* Index as published by the authority of *Clement* the Eighth in 1595, and an Index of the decrees made from that time to the 20th day of February 1664, wherein those decrees were at large set forth. In 1665 the general Index of prohibited books made and published in the year preceding, being rendered less intricate, and enlarged, was published by command of *Alexander* the Seventh; and in 1667, by his command, the same Index was again published, and with it the bull aforesaid, the *Tridentine* Index as published by *Clement* the Eighth, and the Index of the decrees made from that time to the 7th of May 1667; the three latter, it is said, being published that the origin of the prohibition of the books might be known. This last general Index contains the following article [e]:

"Libri omnes, et quicunque Libelli, Commentarii, Com-"positiones, Consulta, Epistolæ, Glossæ, Opuscula, Orationes, "Responsa, Tractatus, tam typis editi quam manuscripti, con-"tinentes et tractantes infrascriptas materias, seu de infra-"scriptis materiis:"

De mobilitate Terræ, et immobilitate Solis.

"All books, and whatever tracts, commentaries, compo-"fitions, decrees, epiftles, gloffes, effays, orations, answers, "treatifes, both printed and manuscript, containing and treat-"ing of the underwritten matters, or concerning the under-"written matters:"

Of the mobility of the Earth and immobility of the Sun.

It is needless to say how nearly this last prohibition, and the aforesaid decrees, in case the court of *Rome* had continued to enjoy that extent and plenitude of power which it some

[e] Which is not to be found in the Index of the decrees; wherefore I am inclined to think the general prohibition contained in it was made by pope Alexander, and by his command

directly inferted in this last general Index, or in that Index which was made under his direction in 1604, and thence transfered into this last.

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time possessed, would have affected the learned labours of the most illustrious Newton, and other excellent authors, who, to the glory of the fole adorable Being of all perfections, and to the enlargement and humiliation of the mind of man, have manifested the wonderful magnificence, beauty, order and excellence of the material creation, with the universality, fimplicity, and force of the few laws whereby the whole is governed and preferved.

The feveral circumnavigations of the earth that have enfued on the discoveries begun by the noble prince Henry having irrefistibly proved that the earth is round, and its other hemisphere inhabited, and the central position of the sun, with the diurnal and annual motions of the earth, being established by principles of science, I shall leave to the Roman doctors the care of the wound given to their favorite Infallibility by the manifest errors of the court of Rome, and to more equal judges to determine whether in this case Ptolemy or the Pontificate has the best right upon the whole to bear away the prize of ariumphant error.

S E C T. XXI.

IN the next place we shall briefly consider what knowledge the Europeans and their neighbours had of the inhabited parts of the earth in times preceding the discoveries begun by prince Henry.

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Troy was destroyed. Strabo [f] fays, that "the navigation " of the Phænicians was commonly known, who failed even " beyond the pillars of Hercules, and built cities both there and "about the middle parts of the Libyan coast, a little after the Trojan times." Pomponius Mela [g] says that "it was " fome time doubtful whether Africa were furrounded by the " fea, or had a boundless extent: but Hanno the Carthagenian " being fent to make discoveries, having passed the strait's "mouth, and failed round a great part of it, related that not Year of the World.

"fea but provisions failed him." And Pliny [b] fays, that "Hanno, when Carthage flourished in power, having sailed

"from Gades to the end of Arabia [i] committed the voyage to writing, and that Himileo was sent at the same time to dif-

cover the outermost parts of Europe."

In 1533 Gelenius printed at Bafil a short piece in Greek, bearing the title of, "The circumnavigation of HANNO, com-"mander [\beta \alpha \sigma i \text{\text{News}} of the Carthaginians, of the Libyan " parts beyond the Herculean pillars, which he dedicated in "the temple of Saturn, shewing as followeth." It is therein declared that it feemed good to the Carthaginians that Hanno should sail beyond the pillars of Hercules, and build Libyophænician cities; that he failed with 60 ships of 50 oars each, taking with him 30,000 men and women, with provisions and other necessaries; that having passed by the pillars, and failed beyond them two days fail [k], he built the first city, naming it Thymiaterio; that afterwards proceeding westward they came to Soloentum a Libyc promontory [being, as some suppose, cape Cantin where having erected a temple to Neptune they failed eastward half a day, till they came to a lake lying not far from the fea, and having paffed it about a day's fail they built cities by the sea, called Caricos Wall, Gytte, Acra, Melitta, and Arambe: that departing thence they

[h] Lib. ii. cap. 67.

[i] That Hanno failed to the end of Arabia is with reason supposed by Salmasius, in his Plinian Exercitations, to be a mistake.

[k] Herodotus, lib. iv. fays, that a thip under full fail completeth in a long day 70,000 fathoms, and in a night 60,000. The Greek fathom being 7. taches 6:0.525 English measure, the whole number of fathoms makes 148.804. Xenophon, in his Expedition of Cyrus, lib. vi. fays, it is as far from Byzantium

to Heraclea as a trireme galley can row in the longest day. If the situation of these two places be given aright in our best modern maps, their nearest distance by sea, I apprehend, is about 130 English miles. Arrian, who governed Cappadocia under the emperor Adrian, in his Circumnavigation of the Euvine sea, makes their distance amount to 1670 statuce is composed of the several distance is composed of the several distances of many intermediate places, including the slexures of the land in passing from place to place.

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came to the river Lixus [supposed by some to be the Sus] whence they sailed by a desart coast to the south two days, and then again to the east a day's course; that having sound in the bottom of a certain bay a small island in circuit stadia they peopled it, naming it Cerne. They conjectured that it lay right against Carthage; for the navigation was similar from Carthage to the pillars, and from them to Cerne. Thence they proceeded to make discoveries, until, as some understand this history of the voyage, they came within a degree of the equinoctial line; but, their provisions failing, they sailed no further.

This piece of history has received different treatment among the ancients as well as moderns. Pliny [l] fays, "there "were commentaries of *Hanno*, who was ordered in the most " flourishing state of the Punic affairs to explore the ambit of " Africa, whom many of the Greeks and Romans following "have related indeed other things fabulous, and that many "cities were there built by him, of which there is neither " memory nor footstep extant." And Æmilianus, one of the company at the Feast of the Sophists, written by Athenæus, having observed [m] that "Juba, king of the Moors, a man " of various learning, in his commentaries concerning Libya, " mentioning the citron, faid that it was called by the Libyans "the He/perian apple, from the time that Hercules brought " into Greece apples called golden from their colour — Demo-"critus replied; If Juba relates such things, farewel to Libyc books, and the wandrings of Hanno." Of the moderns fome have taken for granted, and others infifted that we have it in its genuine state: some have called it a fragment; others fupposing it an abridgment of the original work of Hanno, and others treating it as supposititious. Ramusio, who was greatly effected for his learning and judgment, fays that it was written in the *Punic* tongue, translated thence into *Greek*, whence he translated it into Italian, and published it in his

large collection of voyages in the 16th century [n], together Year of the World. with a discourse upon it, containing his own observations in support of it, and what passed in conversation at Venice, between count Rimondo of Verona and a Portuguese pilot, who was not only well skilled in navigation, but by much reading and application had gained great knowledge, and was particularly well acquainted with the maps of Ptolemy; and had moreover traversed the western coast of Africa so often that he was well acquainted with its principal havens, rivers, and mountains, of which he had taken draughts. The count, who had a great regard and friendship for him by reason of these qualifications, read this voyage of Hanno to him. He was furprized to find that the coast of Africa was so well known two thousand years before, and that the knowledge of it had been lost till the Portuguese made their late discoveries; and then, proceeding point by point thorough the voyage, he explained the feveral parts, reconciling them with the fituation, course, and nature of the lands and seas as he had found them in the feries of his navigations; and the famous Bochart, giving credit to this piece of history as now extant, has by his observations illustrated part of it in his facred Geography [o]. The warmest advocate for this piece is Isaac Vossius, who contends for its great antiquity as well as truth, faying it is far more ancient than all the monuments of the Greeks; and its greatest opponent is Mr. Dodwell. The number and length of their arguments will not admit of their being here inferted — The geographers and critics making use of this history I could not forbear mentioning it; but, without entering into farther particulars, shall leave it, after observing that neither Vossius, Dodwell, or any of their followers, or other late writer on this subject, whom I have seen, appears to have read Ramusio's discourse, with his account of what passed between count Rimondo and the Portuguese pilot, who, from his

lished in 1563. [0] Lib. i. cap. 37.

[[]n] The third edition of this work, the only one that I have feen, was pub-

3401. 44th Olymp. hrit year.

Year of the knowledge of that large tract of sea-coast which is described World. in the history, must, I think, be able to judge whether those descriptions were or were not taken from nature. And if the description of the sea-coast be such as could not be given without a voyage made along it, the evidence arifing thence in favor of this hiftory feems to me worthy of confideration.

> HERODOTUS in his Melpomene says: Asia is inhabited as far as India; what lyes beyond it to the eastward is defart, nor can any one fay what it is. And a little after: "wonder at those who have bounded and divided Libya [p], "and Asia, and Europe, for their difference is not small. "In length indeed Europe exceeds the others; but with re-" spect to breadth it appears to me not worthy to be com-" pared. Libya sheweth itself to be flowed round, excepting "where it borders upon Afia. Neco king of Egypt was the "first we know of that discovered this, who, after he had " left off digging the chanel leading from the Nile to the " Arabian gulph, fent Phænicians in ships, commanding: "them to fail out on the back [of Libya] by the Herculean. " pillars, as far as to the north sea, and so to return to Egypt. "The Phænicians therefore failing out of the Erythrean fea-" navigated the fouthern sea, and when autumn came, going "ashore, they sowed the land in whatsoever part of Libya-"they were failing, and waited the harvest; and having " reaped the wheat failed: thus two years being spent, in the " 3d year, having passed the Herculean pillars, they returned "into Egypt, and related what is not credible to me, though " perhaps to another, that failing round Libya they had the "fun on the right hand. Thus it was first known." It being certain that these men when they had failed to the fouthward of the tropic of Capricorn must have had the sun on their right hand at mid-day at any feason, when standing in that position which placed it on their left in their own country, it is evident the matter related, which appeared

> > [p] Meaning Africa,

strange to them and incredible to Herodotus, instead of giving Year of the any real cause of objection to their credit, was the natural corroborating proof of the truth of their narration, in case their actual return up the Mediterranean sea had wanted any further evidence of it. Afterwards he fays, " Europe is not " fully known to any one, nor whether it be bounded to the " east and the north by the sea."

S E C T. XXII.

HE most judicious and saithful Polybius was born at 3800.

Megalopolis, a city of Arcadia. In the 4th book of fourth year. his history, speaking of the known habitable world, he fays, "It is divided into three portions under three names, Apa, " Libya, and Europe, which are bounded by the Tanais [q], "the Nile, and the strait at the Herculean pillars. Asia lyes " between the Tanais and the Nile - Libya lyes between the " Nile and the pillars of Hercules - These countries therefore "more universally viewed possess the space on the south of our [the Mediterranean] sea, from the east to the west. " Europe lyes opposite to them both towards the north, ex-"tending with a continued tract from east to west. The " best and largest part of it lyes under the north between the "river Tanais and Narbo - From Narbo and the adjacent " country to the Pyrenean mountains the Celtæ dwell — The "remaining part of Europe, which extendeth from these "mountains to the west and to the Herculean pillars, is sur-"rounded by our sea and by the outward sea. That part "which extendeth on our fea to the Herculean pillars is " called Iberia, that which lyes upon the outward, and what " is called the great sea, hath no common name, having been "but lately discovered. The whole is inhabited by barbarous " and populous nations --- But as with respect to Asia and

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"Libya, in what manner they join each other about Æthiopia, "no one to our times can certainly fay, whether the parts to the fouthward be continued continent, or furrounded with the fea; in like manner the parts extending between Tanais and Narbo to the north are to this time unknown to us." Of the eastern boundary of Asia he makes no mention.

Christian Æra.

STRABO, book 2d, having defined the earth to be a globe, and diftinguished by five zones, fays, "The northern hemis-" phere containing two quadrants of the earth, made by the " equinoctial circle with the circle passing through the poles, " in each of these is conceived a quadrilateral figure, the nor-"thern fide of which is half of a parallel circle towards the " pole, the fouthern fide half the equinoctial; the other fides " are fegments of the circle passing through the poles opposite " each other, equal in length. In the one of these quadri-" lateral figures (it matters not which) we say our world is " placed, furrounded with the fea, and like an island. " is evident to fense and reason. But if any one disbelieve "this reason, it would differ nothing in geography to make " it an island, agreeing to what we have from experience, that " it is circumnavigable from the east each way, and from the "west, a few of the middle regions excepted; for to bound " these with sea or uninhabited land differeth not; for a geo-" grapher feeketh to describe the known parts of the world, " onlitting the unknown. It will fuffice by joining a right "line to the extreme points of the preternavigation each " way, to complete the whole form of the faid ifland. " therefore the island be placed in the said quadrilateral figure. "We must take its apparent magnitude, taking from the "whole magnitude of the earth our hemisphere, and from " this the half, and from this again the quadrilateral figure " in which we fav the world lyes --- But feeing the form of "the portion of the northern hemisphere between the equi-" nochial and the parallel taken towards the pole is a spondyl, " and the circle palling through the pole bifecting the hemif-" phere

Christian

" phere bifects the spondyl also, and maketh the quadrilateral "figure, the quadrilateral figure on which the Atlantic ocean -"Iyeth will, 'tis plain, be less than the surface of the spondyl, "and the habitable world a chlamydoidal [r] island in it, being " less than half of the quadrilateral portion. This is mani-" fest from geometry, and the vastness of the circumfluent " fea, which hideth the extremities of the continents each " way, and draweth them into a contracted form, in length " 70,000 stadia, for the more part bounded with sea which "cannot be navigated for its greatness and solitude; in " breadth 30,000, bounded with uninhabitable parts through "heat or cold: the part of the quadrilateral figure unin-" habited through heat is in breadth 8800 stadia, and its "greatest length 126,000, equal to half the equinoctial." --- He observes that " modern writers have nothing to relate "beyond Ireland, which lyes near and over against Britain, " to the northward of it, and is inhabited by wild men, who " live wretchedly through cold, fo that [he thinks] the boun-"dary should be placed in those parts." He afterwards says, that " the known world hath its breadth defined by extreme " parallel lines, which divide its habitable parts from the un-"inhabitable each way; and that they are towards the north " that which paffeth through Ireland, and towards the torrid "zone that which passeth through the cinnamon country." The breadth he measures by a right line drawn northward from the fouth fide-line, and passing by Meroe, Siene, Alex andria, Rhodes, Caria, Ionia, Troas, Byzantium, and the Borystenes [s], into the country of the Roxolani --- The most western part of the world he says is the promontory of Spain " called Sacred." In the 15th book, speaking of India, which he places first towards the east, to prepare his reader for the imperfect account given of it, he fays, "It is to be " considered with a benevolent mind, because India is most " remote, and not many of the inhabitants of our parts have

[r] Resembling the form of a cloak.

[s] The Nieper.

" feen it, and those who have feen it have feen part only, the " greater part they relate from hear-fay; and indeed what "they have feen, has come to their knowledge in a military " march and course; wherefore they do not give a like rela-" tion of the same things, even when they write as of things " carefully examined. Some of them, although they were in "the fame expedition and peregrination, as those who with " Alexander subdued Asia, often relate things contrary to "each other; and if they differ thus concerning things feen, "what ought we to think concerning things related from " hear-fay? But neither do others who have wrote concern-" ing these things long after them, nor those who now sail "thither, relate any thing certain --- And of those traders "who now fail out of Egypt by the Nile and the Arabian gulph as far as India, few have failed as far as to the "Ganges, and they are illiterate people, whose accounts are of " no use for writing a history of places." Afterwards he bounds India on the north by the extreme parts of Taurus, and the chain of mountains called by the Macedonians Caucasus, extending to the eastern sea; on the west by the river Indus; the fouth and east fides, being much greater than the other fides, extend, he fays, to the Atlantic fea; that its length is from west to east, and what extends as far as Palibothra may be spoken of with certainty; but the parts beyond are taken by conjecture of those who sail from the sea up the river Ganges as far as Palibothra. In the 17th book he fays, "The figure of Libya is a rectangled triangle, " considered in plano, having for the base the coast upon the "Mediterranean sea from Egypt and the Nile as sar as " Mauritania and the Pillars. The fide rectangular to this " is formed by the Nile as far as Æthiopia, being projected to " the ocean; the fide fubtending the right angle all the fea-" coast between Æthiopia and Mauritania. The part towards " the vertex of the faid figure, falling within the torrid zone, we " speak of by conjecture, it being inaccessible; so that we " can fay nothing as to the greatest breadth of the country." SECT.

S E C T. XXIII.

Pomponius mela [t] fays, "What lay beyond christian Era. Era. "the same were ocean or frozen land with a boundless extent. "The natural philosophers and Homer said that the whole "world is flowed round with the fea; and Cornelius Nepos, " a more modern and certain author, hath produced Quintus " Metellus Celer a witness of this matter, and recordeth him "to have related thus: When he was proconful in Gaul " certain Indians were given to him by the king of the " Suevi [u]; upon enquiring whence they came into those " parts, he was informed that being carried by the force of " tempests out of the Indian seas, and having passed over the "interjacent [feas], they at length came upon the coast of "Germany." "Nepos, as quoted by Pliny [w], related of " the northern circuit, that Indians, who failing out of India " for the fake of commerce had by tempests been carried " into Germany, were presented by the king of the Suevi to " Quintus Metellus Celer, collegue of Lucius Afranius in the "confulfhip; but at that time proconful of Gaul." In the year of the world 3945 Metellus was proconful of Transalpine Gaul. The time of the birth or death of Nepos is not known; but as he was the familiar friend of Cicero and

[t] Lib. iii. c. 5.

[u] The people, whose king gave these Indians to Metellus, have different names given them in different Pomponian codes. Vadianus, in his edition, calls them Suevi; in the last edition, published by Abraham Gronovius, they are named Bati, for which reading If. Vessus contends, adding that the Bati are the Batavi. Pliny, in his account of this transaction (which follows here immediately) calls them Suevi. Hermolaus Barbarus and Harduin sup-

pose this to be the true reading. Tacitus, in his treatise of the situation, customs, and people of Germany, says, "the Suevi possessed the greater part of Germany, being distinct nations with different names, though in common they were called Suevi." And Dion Cassus, in the 51st book, says, that, accurately speaking, the Suevi dwell beyond the Rhine; for there are also many other people who take to them selves the name of Suevi."

[w] Lib. ii. c. 67.

Christian Atticus, from this and other circumstances of his life it is -certain he lived in the proconfulship of Metellus.

 $P_{LINY}[x]$ fays, "From Gades and the columns of Hercules "the whole west round Spain and France is at this time na-"vigated; and the greater part of the northern ocean hath " been navigated, Augustus Cæsar having sent a fleet round "Germany to the promontory of the Cimbri [y] --- On the " other fide of Gades, from the same west a great part of the " fouth bay [finus] in the circuit of Mauritania is at this time "navigated." Afterwards [z] he fays, "Our part of the " earth, fwimming as it were in the furrounding ocean, ex-"tendeth farthest from east to west, that is from India to "the confecrated pillars of Hercules at Gades, 8,568,000 " paces, as Artemidorus computes; but according to Isidore "9,818,000. Artemidorus addeth, from Gades round the " facred promontory to the promontory of the Artabri [a], "where the front of Spain runneth out farthest, 491 [miles] "more. The measure is taken two ways. From the river " Ganges and its mouth where it falls into the eastern ocean, "through India and Parthyene [b] to Myriandrus [c], a city of Syria fituated in the Iffic bay, 5,215,000 paces. Thence " by the nearest course to the island Cyprus, Patara in Lycia, "Rhodes, Astypalæa[d], islands in the Carpathean sea [e], " Tanarus [f] in Laconia, Lilybæum [g] in Sicily, Calaris [h] " in Sardinia, 2,103,000 paces. Thence to Gades 1,250,000 " paces, which whole measure from that sea maketh 8,568,000 "paces. Another way, which is more certain, extendeth

[x] Lib. ii. c. 67.

y The Scaw, or north cape of Jutland.

[z] Cap. 112.

[a] This cape, after bearing the names of promontorium Artabrorum, Celticum, and Nerium was named Finis terræ (The end of the land) whence it is now called Finister.

[b] Part of ancient Parthia, and of

the present Persian Irac.

[c] Formerly a large fea-port town, of which, I understand, there are at present no remains, situated at the entrance of the bay formerly called Iffic, and now Golfo di Laïazzo.

[d] Stampalia.

[e] The fea near Scarpanto, an island near Rhodes, anciently called Carpathus.

[f | Cebo Matapan, or Cabo Maini. [g] Cabo Boei, or Cabo di Marfalla.

[b] Gaglire, or Cagliari.

" chiefly

"chiefly by land from Ganges to the river Euphrates 5,169,000 paces. Thence to Mazaca [i] in Cappa"docia 319,000. Thence through Phrygia [k], Caria [l],
"Ephefus [m] 415,000; from Ephefus through the Ægean
"fea to Delos [n] 200 [miles]; to the ifthmus 212 [miles]
"500 [paces]. Thence by land and by the Lechaic fea [o],
"and the Corinthian bay to Patras of Peloponnesus [p] 90,000

[paces]; to Leucas [q] 87,500; to Corcyra [r] as many;
"to the Acroceraunian [s] [mountains] 132,500; to Brun"disum [t] 87,500; to Rome 360,000. To the Alpes at
"Scingomagus [u] 519 [miles]. Through Gaul to the Pyre-

"næan mountains at *Illiberis* [w] 927; to the ocean and shore

" of Spain 331. By the passage at Gades 7500 [paces], which measure, by Artemidorus's method, maketh 8945

"[miles].

"But the latitude of the earth from the fouthern fituation to the north is collected to be near one half less; 4,490,000 [paces] by which it is manifest how much heat taketh away on one side, and cold on the other; for neither do I imagine lands to be wanting, or that it is not in the form of a globe; but that there are unknown uninhabitable parts each way. This measure runneth from the shore of the Æthiopic ocean where it is inhabited to Meroe [x] 1,000,000 [paces]. Thence to Alexandria [y] 1,200,050. To Rhodes 563 [miles] To Gnidos [x] 87,500 [paces]. To Con [a] 25,000. To Samos 100,000. To Chios 94,000. To the Sigean

[i] Another name of the city C.efarea in Cappadocia, now Tifaria.

[k] Sarcum.

[1] Adinelli, or Germian.

[m] Ephefo, or Fiena.

[n] Sdiles, or Sdilles.

[o] Gulph of Lepanto.

[p] Morea.

[q] S. Maura, or Maur.

[r] Corfu, or Corfou.

[s] Cimariotti, or Monte d: Chimara.

[t] Brindisi.

[u] Suze.

[w] Colibre.

[x] Gueguere, Elfaba, and Bed Amare, or Naulebabe.

[y] Scanderia.

[2] A city of Caria in Afia Minor, now a huge heap of ruins near cape.

[a] Stancou, or Lango.

" promontory [b] 12,500, To the mouth of the *Pontus* [c] 312,500. To the promontory *Carambis* [d] 350 [miles], "To the mouth of the Mæotis [e] 312,500 [paces]. To the "mouth of the Tanais 275,000; which course by sea may "be rendered shorter 89,000. From the mouth of the "Tanais the most diligent authors have made no certain dif-"covery. Artemidorus thought all beyond it unknown, "though he confesseth that about the Tanais nations of the " Sarmatæ[f] dwell to the northward. Isidore addeth " 1,200,050 [paces], as far as Thule [g]; which is the con-" jecture of divination. I understand the country of the "Sarmatæ is known to be no less in extent than that space; " and indeed how great ought it to be to contain innumerable " nations often changing their habitations; wherefore I take "the ulterior measure of the uninhabitable quarter to be "much greater; for I know that from Germany immense "iflands have been not long fince found."---Pliny [b], with others of the ancients, supposed the Caspian sea to be a bay of the northern or Scythic ocean.

S E C T. XXIV.

"divided by the ancients into three continents, is ter"minated on the east by unknown land adjoining to the
"eastern people of great Asia, the Sinæ and Sericæ--- On the
"fouth likewise by unknown land, which encompasseth the
"Indian sea, and comprehendeth Æthiopia which is south of
"Libya, and is called Agisymba--- On the west also by un"known land which receiveth the Æthiopic gulph of Libya,
and then by the western ocean which lyes on the western-

[c] The Euxine or Black sea.

[d] Cabo Pifello.

[f] Tartars.

[g] Iceland, or, as fome, Schetland.

[b] Cap. 67.

[[]b] Janizzari, or Janisari.

[[]e] Mar delle Zabacche, or Mar de la Tona.

[[]i] Geogr. Enar. lib. vii. cap. 5.

"most parts of Libya and Europe --- And on the north by "the ocean which encircleth the British islands, and the " northernmost parts of Europe, called the Deucalidonian and " Sarmatic, and also with unknown land adjacent to the most " northern regions of great Asia, Sarmatia, Scythia, and "Serica --- The fouthern boundary of known land is termi-" nated by a parallel fouth of the equinoctial 16 parts, 26 " minutes, of such parts as the greatest circle contains 360 "--- A parallel 63 parts north of the equinoctial terminates "the northern limit, and passes through the island Thule; so "that the latitude of land known is 79 parts, 26 minutes, or "80 entire degrees; and is near 40,000 stadia, one part or " degree containing 500 stadia, as hath been found by dili-" gent admeasurements, and the whole circuit comprehendeth "180,000 stadia. Again, a meridian passing through the " metropolis of the Since terminateth the eastern limits of " land known, being distant eastward from that which passeth "through Alexandria 119 parts, 30 minutes, reckoned on the " equinoctial, which is almost eight equinoctial hours. " western part is bounded by the meridian passing through "the fortunate islands, and which is distant from the meri-"dian of Alexandria 60 parts, 30 minutes, and four equi-" noctial hours; but from the most eastern semicircle 180 " parts, and 12 equinoctial hours; fo that the longitude of "the known world is judged to be upon the equinoctial " 90,000 stadia; upon the most southern part of it 86,330 "nearly, and upon the northernmost 40,854. And again, "upon the parallel which passeth through Rhodes, under "which usually mensurations are made, and which is distant " from the equinoctial 36 parts, are nearly 72,000 stadia; " and upon the parallel passing through Syene [k], and which " is distant from the equinoctial 23 parts, 50 minutes, and is fituated almost in the middle of the whole latitude, are

Christian

Third Century.

"82,336 stadia, according to the proportion of the faid par-" allel to the equinoctial."

AGATHEMER, whose age and country are uncertain, but who probably lived in the former part of the third century, in his Epitome of Geography [1] fays, "the ancients have described "the habitable world to be round, Greece in the midst, and " Delphos [in the midft] of that; for it possesses the navel of "the earth. Democritus, a man of much experience, first " observed that the earth is extended, the length being equal "to the whole and half of the breadth. With him agreed "Dicearchus the peripatetic. But Eudoxus [made] the "length double the breadth; and Eratosthenes more than "double. Crates supposed it a semicircle. Hipparchus tra-" pezoidal. Others like a tail; but Posidonius the Stoic, " like a fling, and wide in the midst from fouth to north, " narrow towards the east and west; but so as the parts east-" ward are wider towards the Indian [land]." --- In his first mention of the length of the habitable world from the river Ganges to Gades [m], where he gives the particulars of the two: fold measure, saving a difference of 5 stadia in the first, he agrees with Pliny, and explains the measure from Cagliari to Gades, declaring it to be taken by the Gymnasian islands (Minorca, Majorca, and Ivica). Then proceeding to mention the breadth of the inhabited earth, measuring it from the Æthiopic ocean by Meroë and Alexandria to the Tanais, he makes it amount to 37,056 stadia. The parts beyond the mouths of the Tanais to the northward, he observes, are unknown. Afterwards [n] he fays, "the circuit of the whole " earth is declared to be 252,000 stadia; the magnitude of "the habitable world is measured from east to west 70,000 " stadia; that is from the mouth of the river Ganges, the " easternmost in India, to the westernmost promontory of " the whole habitable world, which is called Sacred, and is " a promontory of Lustania more west than the Hercules [l] Lib. i. cap. 1. [m] Lib. i. cap. 4. [n] Lib. ii. cap. 1. " pillars.

" pillars about 3000 stadia. And this is the length of the whole habitable world."

Christian TEra.

MARCIAN of Pontic Heraclea, whose age is uncertain, but who probably wrote his circumnavigation before Constantine removed the seat of the empire from Rome to Constantinople, says [o], "the magnitude of the habitable world from east "to west measures 78,545 stadia, that is from the mouths of the river Ganges, the easternmost river in India, to the "westernmost promontory of the whole habitable world, "which is called the Sacred promontory --- a strait line of the breadth where broadest may measure 43,060 stadia, that is "from south to north, as from the Æthiopic ocean to the "island Thule."

In the cosmography that passeth under the name of Fourth Cen-Æтнісиs, whom fome suppose to have lived in the time of tury. the elder Theodosius [p]; but whether it ought to be ascribed to him, or to Julius Honorius the orator, the learned have not been able to ascertain, it is said "the senate and Roman " people having triumphed over all the world, Julius Cafar "when conful thought fit that by decree of the senate the "whole, then become Roman, should be measured by the "most prudent persons, adorned with every gift of phi-" losophy; therefore, in the consulship of Julius Cæsar and " Marc Anthony, the world began to be measured, that is " from the confulship of the above written, to the consulship " of Augustus the third time, and of Crassus, in 21 years, 5 " months and 9 days, all the east was measured by Zenodoxus " - Also from the consulship of Julius Cæsar and Marc " Anthony, to the tenth confulfhip of Augustus, in 29 years, "8 months and 10 days, the northern part was measured by "Theodotus - In like manner from the confulship of Julius " Cæfar to the confulship of Saturnus and Cinna the southern " part was measured by Polyclitus, in 32 years, 1 month and [0] Lib. i. §. 1. [p] He began to reign A, C. 379, and reigned 16 years.

"10 days. And thus the whole world, within 32 years, "was surveyed by the measurers, and report made to the "fenate [perlatum est ad senatum] of all its contents [q]." He then proceeds to set forth the seas, islands, mountains, provinces, towns, rivers, and nations [r], contained in the whole, varying therein considerably from the "Extracts of "fulius Honorius pertaining to Cosmography," published with exactness by fa. Gronovius, from the Thuanean code.

In the latter part of this work, which is called Another Description of the Whole World, it is said, "our ancestors and "their followers reckoned Africa a third part of the world, "not for the space of measure, but by reason of the circum-"clusions, because proceeding southward it is hemmed in by its own sea, which ariseth out of the ocean from the west: "thence the boundary of Africa incloseth a straitened and "narrow desart." It is before said that its utmost bound [westward] is mount Atlas, and the islands called Fortunate.

S E C T. XXV.

None of the middle centuries five books of geography were written by an anonymous author of Ravenna. Gronovius observes that, "in the age of Honorius and Æthicus," together with the decreasing majesty of the Roman empire, the Roman language was contaminated as well as the Greek, and, barbarous nations rushing in, the names of places were changed, sometimes in letters, sometimes in syllables, or new ones imposed. That between these authors and the cosmographer of Ravenna the commotions became every where still greater, whence proceeded a wonderful

[q] The number of years, and the confulfhips, which are mentioned to afcertain the time of the feveral menfurations, are irreconcilable with the best chronological tables; but this

may have been occasioned by the negligence of copyists; for Ger. Vessius observes that this author is very corruptly published.

[r] Gentes, quæ numerantur CXXV.

"change of that pure Greek and Latin into some what so " barbarous, that it would form nothing but found, nor could " be understood, if under this cloud there appeared no spark-"ling of the first origin of the words." This geographer, in the third book, treating of Africa, fays, " to the fouth part "the portion of Cham hath for its boundary the ocean which "toucheth Æthiopia Auxumitana, Candacissis of the Trog-" lodytes, Æthiopia of the Garamantes, Æthiopia Biblobatis, " Mauritania Perofis, and Mauritania Egel, to the strait " called Septem-Gaditanum;" and concludes his fourth book, entitled Europa, with the following passage: Item oceani Britanici Spano-Guasconici, verum et Spanici, usque supra scriptum fretum quod diximus Septe-Gaditane, ubi est mons Statiola, vel insulæ Fortunatæ. Whence it appears, if I understand the author aright, that he placed the Fortunate islands near the Agraits of Gibraltar.

Alfred the Great [s], it is well known, provided a respectable sea-force for the defence of his kingdom. Being admirable in all things, by the excellence of his genius he improved naval architecture fo far, that he directed ships to be built much better formed for war than those which had been used by his predecessors, or were used by his enemies. These thips gave him great advantages over the fleets of those fierce invaders the Danes, whole number, according to bishop Asfor [t], "increased daily; so that if 30,000 of them were slain "in one day, they were succeeded by double their number; "whereupon king Alfred"," the bishop says, "commanded * In the 32 ? so barks and gallies, that is, long ships, to be built throughout " the kingdom, that he might encounter the enemies on their " coming at fea [u];" and Mr. Selden, in his Mare Clau-

[s] He was born in the year 749. began his reign in 871, and died in 201.

[u] Crescebat insuper diebus singulis perversorum numerus, adeo quidem, ut si xxx ex eis millia una die necarentur, alii fuccedebant numero duplicato. Tunc rex Ælfredus justit cymbas et galeas, id est, longas naves, fabricari fum.

[[]t] This bishop had been the king's preceptor, and furvived him feveral years.

Christian fum [w], cites from the Saxon chronicles in the Cotton library - a passage which he thus translates, Construi justit Alfredus rex naves longas quæ cum Danicis præliarentur: Fuere autem duplo illis longiores. Quarum nonnullæ remos habuere sexaginta, nonnullæ plures. Celeriores item fuere illis, minus nutantes, atque altiores. Nec ad formam five Frifiam five Danicam fabricatæ; sed ea quam ipse existimavit præliis commodissimam. " Alfred commanded long ships to be built, to encounter "those of the Danes. But they were twice as long; some " whereof had 60 oars, fome more. They were also swifter, " less liable to roll, and deeper. Not built according to the " Frisian or Danish form, but in that which he thought most convenient for fighting." This consummate prince having by the exercise and cultivation of every military, civil, and religious virtue recovered, defended, and established his kingdom, fent an embaffy to India, of which the following account is given by the monk of Malinfbury, an approved historian in the twelfth century, who, I believe, is the only ancient author extant that mentions this matter. Eleemosynis intentus privilegia ecclesiarum, sicut pater statuerat, roboravit, et trans mars Romam, et ad fanttum Thomam in Indiam multa munera misit. Legatus in hoc missus Sigelinus Shireburnensis episcopus cum magna prosperitate, quod quivis hoc seculo miretur, Indiam penetravit: inde rediens exoticos splendores gemmarum, et liquores aromatum, quorum illa humus ferax est, reportavit. "intent on works of charity, he strengthened the privileges " of the churches, as his father had purposed, and fent many " presents beyond sea to Rome, and into India to St. Thomas. "Sigelin bishop of Shireburn, the ambassador on this [occasion] "with great fuccess penetrated *India*, which may be thought "ftrange in this age: returning thence he brought back fo-" reign gems, and liquors drawn from spices, with which that "foil abounds." From this account, and the course of com-

munication which in those times took place between the western and eastern parts of the world, I conclude that Sigelin, after having been at Rome, went from some port in Italy by sea to the upper part of the Mediterranean, and proceeded thence partly by land, and partly by sea, to India, as the route of the Indian commerce then in use gave him opportunity.

The author of Ymago Mundi, in his chapter of Africa, fays, that beyond Ætbiopia are vast tracts of land rendered desart by the heat of the sun—that beyond these is the great ocean, which, through the sun's heat, is said to boil like a pot.

The knowledge of the Fortunate islands being entirely lost when the geographer of Ravenna wrote, or not long after, they continued unknown till near the year 1300, when they were found by the Genoese; and maritime knowledge was confined within such narrow limits that cape Non, which lyes at the distance of about 170 leagues from the strait's mouth, received its name from a prevailing opinion that it was the utmost boundary of all preceding navigations, and that it was dangerous, if not impracticable, to pass beyond it.

The celebrated ÆNEAS SYLVIUS, whose papal name was Pius the Second, in his cosmographical treatise entitled Asia, written during his popedom [x], says. "We have read in Otto that "under the Teutonic emperors an Indian ship and traders were found on the German coast, and it appeared that they had been driven by the winds from the eastern quarter, which could by no means have happened if, as many think, the north sea was frozen and not navigable. From the columns of Hercules the circuit of Mauritania, Spain, and France, and almost all the west is at this time navigated. The east is unknown to us through the diversity of religions and empires, and immense barbarism. But the ancients relate that it was navigated, and they gave names to the ocean that surrounded the extreme lands from the respective coasts. — None of the ancients mention the Baltic gulph.

[[]A] He was created pope in August 1458, and died in August 1464.

Q "They

"They believed it to be ocean, and part of what is called "the Germanic --- Albert the Great knew it to be a great "gulph." A little after he fays, "By confent of all there "are three chief portions of the whole habitable [world]. "The first and greatest Asia; the second Aphrica; the third " Europe. Asia is joined to Aphrica, as Ptolemy observes, by "the back of Arabia, which separates our sea from the " Arabian gulph. No body denies this: but he adds that " elsewhere it is joined to it by unknown land which fur-"roundeth the Indian sea; in which opinion he is almost "fingular; for all whom we have found writing of the " fituation of the world place the Indian sea without bounds "to the fouth and east, and will have it to be part of the "ocean, as is related by those who have failed from the " Arabian gulph into the Atlantic sea, and to the columns of " Hercules.

The learned Sebastian Munster, who was called the Strabo of Germany, in the introduction to his Novus Orbis, The New World, published in the former part of the 16th century, fays. "Ptolemy and Strabo knew not of any land "beyond the western shores of Spain and Africa, except "Gades and the Fortunate islands, which are the Canaries; " nor did any after them know any thing of those numerous. " and large islands which are in the midway between Africa "towards the west, and India in the ocean, discovered in our " age. Neither will you find in any author that the ancients " ever adventured on that vast ocean, which leadeth from the "west into the east by the south; for they thought the " African land extended fo far towards the fouth pole, that "by reason of the intense cold there was no conducting a " ship round this way into the east any more than by the " north."

S E C T. XXVI.

AVING taken this view of the world, so far as it was known in former times, with other matters relating to the knowledge of it, let us return to prince *Henry*, whom we left on the *Sacred* promontory preparing his ships to be fent out upon discovery.

Christian Æra.

Hé 1277/

1417.

1418.

In 1417 he fent two ships that passed cape Non, and proceeded to cape Bojador, which running out very far westward into the ocean, and with a strong current making a great sea, the whole appeared fo formidable that they returned; nevertheless the prince pursuing his design, in 1418, the island Puerto Santo was discovered, and in the next year Madeira, which one Macham an English man had discovered in 1344; and, several years before the death of king John, who died in August 1433, Gil Yannez passed cape Bojador, and planted the enfigns of the Christian redemption to the southward. The paffing this cape, it is faid, in the common opinion, was held equal to the labours of Hercules --- Upon this success the prince gave to the king his father in his life time, and to his fucceffors, all the lands he had discovered, or might discover, as far as *India* inclusive. He acquainted pope *Martin* the Fifth with his past, and hopes of greater, achievements, and prayed him to confirm the donation which he had made, and also to grant plenary indulgence, to all persons concerned in profecuting this great defign, which the pope by his bull [y],

[y] Having some years ago, when collecting, for information and use on any occasion, the authentic evidence of the foreign acquisitions made by the Europeans, so far as any wise related to America, in vain examined several editions of the Roman Bullary, the Corps Universel Diplomatique, and the Codex Juris Diplomaticus, and made many other searches in town for this

bull, some references in Solerzano and Selden gave me hopes that it might be found in the library of the latter, placed at Oxford; but although I received from the gentlemen there, with whom I was concerned on this occasion, all requisite assistance, in the most desirable manner, it could not be found.

C' Hilian

freely granted; and thereby declared that whatever might be discovered from cape Bojador to utmost India should by the best right pertain to the Portuguese dominion.

This pope died in February 1431.

In the reign of king Edward, who succeeded king John his father, and died in September 1438, a few ships being fent upon this service they proceeded somewhat sarther southwards. without making any notable discovery.

Pope Eugene the Fourth confirmed by his grant [z] to king Edward that which his predecessor Martin the Fifth had made

to king John.

In the reign of Alphonfus, who succeeded his father Edward, and died in August 1481, the rivers del Oro and Senega, with others, and all the African coast extending towards the fouth and east, as far as cape Catherine, with the islands St. Thomas, of the Prince, Fernand Po, of cape de Verd, and the Azores were discovered.

1454. January 8.

January the 8th 1454 pope Nicholas the Fifth made the following grant to king Alphonsus and prince Henry, by his bull of that date, which is not to be found in the Roman Bullary, being, I believe, first published at large at Hanover in 1693 by Leibtnitz, in his Codex Juris Diplomaticus. Oderic Raynald, in his continuation of the annals of Baronius [a], had before published an extract of it, with some variations; and baron Dumont transcribing it verbatim from Leibnitz, after giving it a different title [b], made it part of the Corps Universel Diplomatique, adding in the margin those variations. Whoever gave it the title [c] prefixed in the edition of Leibnitz, was evidently a stranger to the true relation of the grantees,

[2] I have not met with this grant.

[a] Tom. 19.

[b] Bulle du Pape Nicholas V, qui donne à Alphonse, Roi de Portugal, l'Empire de Guinée, et defend à tous autres d'y aller sans la permission des Portugais. A Rome le 8 Janvier 1454.

[c] NicolausV, dat Alphonso Lusita-

niæ Regi, cujus filius Henricus, studio iter in Indiam Orientalem aperiendi, usque ad Guineam et Nigrum fluvium penetraverat, et insulas varias detexerat, imperium Ghineæ, et potestatem barbarica regna subjiciendi, prohibens ne alii sine Lusitanorum permissione ad eas oras navigent. Rove VI Id. Januar. 1454.

Henry

Henry being therein named the fon of Alphonsus. Upon giving an exact copy of the grant from Leibniz (omitting the title, which I am fully persuaded made no part of the record, or of any exemplification of it) with the different readings, I presume that in the translation I may take the liberty to make those sew corrections which appear to me necessary to give the true sense of the original.

"R OMANUS pontifex, regni cælestis clavigeri " successor, et vicarius Jesu "Christi, cuncta mundi clima-" ta, omniumquenationum in " illis degentium qualitates pa-" ternà consideratione discuti-" ens, ac falutem quærens et ap-" petens fingulorum, illa per-" pensà deliberatione salubriter " ordinat et disponit quæ gra-" ta divinæ Majestati fore con-" spicit, et per quæ oves sibi " divinitus creditas ad uni-"cum ovile dominicum re-" ducat, et acquirat eis feli-" citatis æternæ præmium, ac " veniam impetret animabus, " quæ cò certius, auctore Do-" mino, provenire credimus, " si condignis favoribus et " fpecialibus gratiis eos ca"THE Roman pontif, suc-cessor of the key-bearer " of the heavenly kingdom, and " vicar of Jesus Christ, dis-" cussing all the climates of " the world and the qualities " of all the nations dwelling " in them with paternal con-" fideration, and feeking and " defiring the falvation of all " men, wholfomely ordaineth "and disposeth on mature " deliberation those things " which he fees will be a-" greeable to the divine Ma-"jefty, and by which he " may bring the sheep en-"trusted to him by God "into the one only domi-" nical fold, and acquire for "them a reward of eternal " felicity, and obtain pardon " to fouls, which we believe " will more certainly come " to pass, with the bleffing " of the Lord, if we bestow " fuitable favours and special " tholicos

Christian "tholicos prosequamur reges Era. " et principes, quos, veluti " Christianæ fidei athletas et " intrepidos pugiles, non mo--" do Saracenorum cæterorum-" que infidelium Christiani " nominis inimicorum ferita-"tem reprimere, sed etiam "ipfos eorumque regna ac "loca, etiam in longissimis, " nobisque incognitis partibus " consistentia, pro defensione et augmento fidei debellare, " fuoque temporali Dominio " fubdere, nullis parcendo la-66 boribus et expensis, sacti " evidentia cognoscimus, ut " reges et principes ipsi, sub-" latis quibusvis dispendiis, ad " tam faluberrimum tamque " laudabile profequendum o-" pus peramplius animentur.

> " 2. Ad nostrum siquidem nuper, non fine ingenti " gaudio et nostræ mentis læ-" titia pervenit auditum, quod " dilectus filius nobilis vir " Henricus infans Portugaliæ, " charistimi in Christo filii " nostri Alphonsi Portugaliæ et 66 Algarbis regnorum regis il

" graces on those catholic "kings and princes, who as "the intrepid champions of " the Christian faith we know " by evidence of fact not " only repress the cruelty of the Saracens and "infidels, enemies of the " Christian name, but also "them and their kingdoms "and places, though fituate " in the most distant and to " us unknown parts, for de-" fence and encrease of the "faith, vanquish, and to "their temporal Dominion " fubject, sparing no labours "and expences, that those "kings and princes, all ob-" stacles removed, may be the " more animated to the pro-" fecution of fo falutary and " laudable a work.

" 2. Forasmuch as it hath " lately, not without great "joy and pleasure of our " mind, come to our hearing "that our beloved fon the " noble personage Henry in-" fant of Portugal, uncle of " our most dear son in Christ illustrious Alphonsus " king of the kingdoms of Por-" tugal and Algarve, tread-" luftris,

" lustris, patriis [a] inhærens " vestigiis claræ memoriæ " Joannis dictorum regnorum " regis ejus genitoris, ac zelo " falutis animarum et fidei ar-"dore plurimum fuccenfus, "tanquam catholicus et verus " omnium creatoris Christi " miles, ipfiusque fidei acer-" rimus ac fortiffimus defenfor " et intrepidus pugil, ejusdem " creatoris gloriosissimum no-"men per universum terra-"rum orbem etiam in remo-"tissimis et incognitis locis " divulgari, extolli et vene-" rari, nec non illius ac vivi-"ficæ, qua redempti sumus, " crucis inimicos perfidos, Sa-"racenos videlicet, ac quof-"cunque alios intideles ad "ipfius fidei gremium re-"duci, ab ejus ineunte ætate "totis aspirans viribus, post "Ceptensem civitatem in A-" frica consistentem per dic-"tum Joannem regem ejus " subactam dominio, et post "multa per ipsum infantem " nomine dicti regis contra " hostes et infideles prædictos,

[a] Paternis. Corps Diplom. ad marginem [Sed patruus omnino legendum].

" ing in the footsteps of John " of famous memory king " of the faid kingdoms bis " father, and greatly inflam-"ed with a zeal for the fal-" vation of fouls and a fervor " of faith, as a catholic and " true foldier of Christ the " creator of all things, and a " most couragious defender "and intrepid champion of " the faith in him, aspiring " from his early youth with " his utmost might to have " the most glorious name of " the faid Creator publish-" ed, extolled and revered "throughout the whole world, " even in the most remote-"and unknown places; also " to bring into the bosom of " his faith the perfidious ene-" mies of him and the life "giving cross by which we "were redeemed, namely the " Saracens and other infidels " whatever, after subduing the "city of Ceuta, situate in " Africa, by king John to his. "dominion, and after many "wars personally conducted "by the faid infant, in the " name of the faid king John, "against the enemies and " infidels aforefaid, not with-" quam

Christian

" quam etiam in proprià per-"fonâ, non absque maximis " laboribus et expensis, ac re-" rum et personarum periculis " et jactura, plurimorumque " naturalium fuorum cæde gef-" ta bella, ex tot tantisque la-" boribus, periculis, et damnis " non fractus neque territus, " fed ad hujufmodi laudabilis " et pii propofiti sui persecu-"tionem [b] in dies magis at-"que magis exardescens, in " oceano mari quasdam solita-" rias infulas fidelibus propa-" lavit, ac fundari ac construi " inibi fecit ecclesias, et alia " pia loca, in quibus divina " celebrantur officia, ex dicti "quoque infantis laudabili "opera et industria quam "plures diversarum in dicto " mari existentium insularum, " incolæ seu habitatores, " veri Dei cognitionem veni-" entes, facrum baptifmum [c]"fusceperunt ad ipsius Dei " laudem et gloriam, ac pluri-"marum animarum falutem, " orthodoxæ quoque fidei pro-" pagationem, et divini cultus "augmentum.

[b] Profecutionem. Corps Diplom. ad marginem.

[c] Baptisma. Caps Diplom. Id. ib.

" out the greatest labours and " expences, and with dangers " and loss of things and per-"fons, and the flaughter of " very many of their natural "fubjects, being neither bro-"ken nor terrified by fo " many and great labours " dangers and losses, but "growing daily more and "more defirous of profecut-"ing this his fo laudable and "pious purpose, hath made "known to the faithful cer-"tain solitary islands in the "ocean sea, and hath caused "churches and other pious " places to be there founded "and built, in which divine " fervice is celebrated: Also "by the laudable endeavour "and industry of the said in-"fant very many inhabitants " of divers islands situate in "the faid fea coming to the " knowledge of the true God "have received holy baptifm, " to the praise and glory of "God, and the falvation of " very many fouls, propaga-"tion also of the orthodox " faith, and encrease of divine " worship.

Christian

"3. Prætered cum olim ad " ipfius infantis pervenisset no-"titiam, quod nunquam, vel " faltem à memoria hominum "non consuevisset per hujus-" modi oceanum mare versus " orientales [d] plagas navi-" gari, illudque nobis occiduis "adeò foret incognitum, ut " nullam de partium illarum " gentibus certam notitiam "haberemus, credens fe maxi-" mè in hoc Deo præftare ob-" fequium, si ejus operà et in-" dustrià mare ipsum usque ad " Indos, qui Christi nomen colere " dicuntur, navigabile fieret, " ficque cum eis participare, " et illos in Christianorum " auxilium adverfus Saracenos " et alios hujusmodi fidei " hostes commovere posset, ac " nonnullos gentiles feu pa-" ganos nefandiffimi Macko-" metisectà minimè infectos po-" pulos inibi medio existentes " continuò debellare, eisque "incognitum facratissimum "Christi nomen prædicare, ac " facere prædicari, regià tamen

" 3. Moreover, although "it had formerly come to . " the knowledge of the faid " infant that it had never, or "at least not within the me-" mory of men, been usual to " fail on fuch ocean fea to-"wards the [fouthern and] " eastern countries, and that "it was fo unknown to us " western people that we had " no certain knowledge of the " nations of those parts, be-"lieving he should chiefly " herein perform his duty to "God, if by his endeavour " and industry that sea might " become navigable as far as " to the *Indians*, who are faid " to worship the name of Christ, "and fo to partake with " them, and excite them to "the affiftance of the Christi-"ans against the Saracens "and other fuch enemies of " the faith, and forthwith to " fubdue certain gentiles or " pagans, people not infected " by the fect of wicked Ma-" homet, there living, and "unto them the unknown "most sacred name of Christ "to preach and cause to "be preached, strengthened " however always by the regal "femper R

[[]d] Meridionales et Orientales. Id. îb.

" femper auctoritate munitus, " à viginti quinque annis citra, " exercitum ex dictorum reg-" norum gentibus, maximis " cum laboribus periculis et " expensis, in velocissimis navi-" bus caravellis nuncupatis, " ad perquirendum mare, et " provincias maritimas versus " meridionales partes et Polum " antarcticum annis singulis " ferè mittere non cessavit, sic-" que factum est, ut cum " naves hujufmodi quamplures " portus, infulas et maria per-" lustrassent [e], ad Ghineam " provinciam tandem perveni-" rent, occupatisque nonnul-" lis infulis, portubus ac mari, " eidem provinciæ adjacen-" tibus, ulterius navigantes ad " ostium cujusdam magni slu-" minis Nili communiter repu-" tati pervenirent [f], et con-

[e] Perlustrassent et occupassent. Cerps Diplom.

[f] Raynaldus per parenthesin addit, ingens illud flumen non fuisse Nilum, sed Nigrum, postea compertum est.

" authority, he hath not ceased " within 25 years last to send "yearly almost an army of " the people of the faid king-"doms, with the greatest la-" bours, dangers and charges, " in most swift ships called " caravells, to search out the "fea and maritime provinces " towards the southern parts " and antarctic pole; and for " it hath come to pass that "these ships having disco-"vered very many havens, "islands and seas, they at " length came to the province " of Ghinea, and having pof-" fessed some islands, havens " and fea adjoining to the " faid province, failing far-"ther they came to " mouth of a certain great " river commonly reputed the " Nile [a], and war was

[a] D'Herbelot, in his Eibliotbeque Orientale, says there are two great rivers in Africa which bear the name of the Nile, and which have the same source, at the foot of the mountain named Aleamar, or, of the moon. The first is called the Nile of Egypt; the second is named the Nile of the Negroes, which sloweth towards the west, and dischargeth itself into the dark sea; for thus the Arabs call the Atlantic ocean, and the sea of the west. Atterwards he adds, that the Nile of the Negroes is at this day called the Niger, or Senega.

"tra illarum partium po-" pulos, nomine ipsorum Al-" fonsi regis et infantis, per " aliquos annos guerra habita " extitit, et in illa quamplures " inibi vicinæ infulæ debellatæ, " ac pacificè possesse fuerunt, " prout adhuc cum adjacenti " mari possidentur. Exindè " quoque multi Ghinei et alii " Nigri vi capti, quidam etiam " non prohibitarum rerum " permutatione feu alio legi-" timo contractu emptionis ad " dicta sunt regna transmissi. " Quorum inibi in copioso " numero ad catholicam fidem "conversi extiterunt, spera-"turque, divinâ favente cle-" mentiâ, quod fi hujusmodi "cum eis continuetur pro-" gressus, vel populi ipsi ad " fidem convertentur, vel fal-" tem multorum ex eis animæ " Christo lucrifient.

"4. Cum autem, ficut accepimus, licet rex et infans
prædicti, qui cum tot tantisque periculis, laboribus et
expensis, nec non perditione
tot naturalium regnorum

"waged for fome years a-" gainst the people of those " parts, in the name of them "king Alphonfus and of the "infant, and in it very many "islands near thereunto were " fubdued and peaceably pof-" fessed, as they are still pos-" fessed with the adjacent sea-"Also many Ghineans and "other Negroes were taken "thence by force; fome like-" wife by barter of things not " prohibited, or by other " lawful contract of purchase "were transmitted to the " faid kingdoms, a large num-"ber of whom were there "converted to the catholic "faith, and it is hoped " (through favour of divine " clemency) that if fuch pro-"gress be continued with "them, either the people "themselves may be con-"verted to the faith, or at " least the souls of many of " them be gained in Christ. "4. But feeing that, as we

"them be gained in Christ.

"4. But seeing that, as we

"are informed, although the

"king and infant, who with

"so many and great dangers,

"labours and expences, also

"with loss of so many natives

"of the said kingdoms, very

R 2 "hu-

"hujufmodi, quorum inibi " quam plures perierunt, ipfo-"rum naturalium duntaxat " freti auxilio, provincias illas " perlustrari fecerunt, ac por-" tus, infulas, et maria hujuf-" modi, acquisiverunt et pos-" sederunt, ut præfertur, ut " illorum veri domini; timen-" tes ne aliqui cupiditate ducti " ad partes illas navigarent, et " operis hujusmodi persecti-" onem, fructum, et laudem " fibi usurpare, vel faltem im-" pedire cupientes, propterea " seu lucri [g] commodo aut " malitià ferrum, arma, ligna-" mina, aliasque res et bona " ad infideles deferri prohibita " portarent vel transmitterent, " et ipsos infideles navigandi " modum edocerent [b], prop-" ter quæ eis hostes sortiores " ac duriores fierent, et hujus-" modi profecutio vel impe-"diretur, vel forsan penitus " cessaret, non absque offensa " magna Dei, et ingenti to-"tius Christianitatis oppro-" brio; ad obviandum præ-

[b] Docerent. Id. ib.

"many of whom have there " perished, affisted only by "those natives, have caused " those provinces to be en-" quired into, and have ac-" quired and possessed such " havens, islands and seas, as " aforefaid, as the true lords " of them; fearing lest any " induced by covetousness " should sail to those parts, and " usurp to themselves the per-" fection, fruit, and praise of "this work, or at least defir-"ing to hinder it, should "therefore either for advan-"tage of gain or through " malice, carry or transmit " iron, arms, wooden wares, " and other things and goods " prohibited to be carried to "infidels, and should teach "those infidels the art of " navigation, by means where-" of they would become more " powerful and obstinate ene-" mies to them, and the pro-" fecution of this matter be "either hindred, or would " perhaps entirely sail, not " without great offence of "God and great reproach of "all Christianity; for pre-"vention thereof, and for " millis

[[]g] Lucrando. Corps Diplom, ad marginem.

"et generaliter statuerint,

" ad dictas provincias acce-

" dere, in sic aequisitis pro-

" vinciis, portubus et infulis,

" ac mari navigare, contrac-" tare, et piscari præsumerent;

" et exinde inter Alfonsum

" regem ac infantem, qui

" nullatenus se in iis sic de-

" ludi paterentur, et præsu-

" mentes prædictos, quam

" plura odia, rancores, dissen-

"fiones, guerræ, et scandala,

" conservation of their right " missis ac pro suorum juris Christian " et possessionis conservatione, "and possession, did then-" fub certis tunc expressis gra-" under certain express most " vissimis pænis prohibuerint, " fevere penalties prohibit and

" unless with their sailors and " quod nullus, nisi cum suis " nautis ac navibus, et certi " ships, and on payment of a " tributi solutione, obtentaque " certain tribute, and express

" prius desuper expressa ab eo-" licence moreover first obtained

" dem rege vel infante licentia, " from the faid king or infant, " ad dictas provincias navigare, " should presume to sail to the

" said provinces, or to trade in " aut in earum portubus con-"their ports, or to fish in the " tractare, seu in mari piscari

" præsumeret; tamen succes-"sea; nevertheles in time " fu temporis evenire posset

"it might happen that per-" quod aliorum regnorum feu "fons of other kingdoms or

" nationum personæ, invidiâ, " nations, led by envy, ma-

" malitià, aut cupiditate duc-" lice, or covetoufness would " ti contra prohibitionem præ-

" prefume, contrary to the " dictam, absque licentia et

" prohibition aforefaid, with-" tributi folutione hujufmodi,

" out licence and payment of " fuch tribute, to go to the

" generally ordain that none,

" faid provinces, in the pro-

" vinces, havens and islands,

" and fea, fo acquired to fail,

" trade, and fish; and there-"upon between king Al-

" phonsus and the infant, who

"would by no means fuf-

" fer themselves to be in those

"things fo deluded, and the

" prefumers aforefaid very

" many hatreds, rancours, dif-

"fenfions, wars, and fcan-

"dals, to the highest of-"in

" in maximam Dei offensam, -" et animarum periculum ve-"rifimiliter subsequi possent " et subsequerentur: Nos præ-" missa omnia et singula de-" bita meditatione pensantes "et attendentes, quod cum " olim præfato Alfonso regi " quoscunque Saracenos " paganos, aliosque Christi "inimicos ubicunque consti-"tutos, ac regna, ducatus, " principatus, dominia, pof-" fessiones, et mobilia et im-" mobilia bona quæcunque " per eos detenta ac possessa "invadendi, conquirendi, ex-" pugnandi, debellandi, " fubjugandi, illorumque per-" sonas in perpetuam servitu-"tem redigendi, ac regna, "ducatus, comitatus, princier patus, dominia, possessiones, " et bona fibi et successoribus " applicandi, appropriandi, ac " in fuos fuccessorumque usus " et utilitatem convertendi, " aliis nostris literis plenam et " liberam inter cætera con-" cessimus facultatem; dicta " facultatis obtentu idem Al-" fonsus rex, seu ejus auctori-"tate prædictus infans, juste " et legitime infulas, terras,

" fence of God and danger of " fouls, probably might and " would cnfue: We weigh-"ing all and fingular the " premises with due medi-" tation, and confidering that we having formerly by " other our letters granted a-" mong other things free and " ample faculty to the afore-" faid king Alphonfus to in-" vade, fearch out, expugn, " vanquish, and subdue all " Saracens and pagans what-" foever, and other enemies of " Christ wherefoever placed, " and the kingdoms, duke-" doms, principalities, domi-" nions, possessions, and move-" able and immoveable goods " whatever by them held and " possessed, and their persons to "reduce to perpetual slavery, " and the kingdoms, duke-"doms, counties, principali-" ties, dominions, possessions, and goods to apply and ap-" propriate to himfelf and " fuccesfors, and to convert "them to his and their use " and profit; by virtue of the " faid faculty, the faid king " Alphonfus, or by his autho-"rity the aforesaid insant, " justly and lawfully hath ac-" portus,

" portus, et maria hujufmodi acquisivit ac possedit et pos-" fidet, illaque ad eundem « Alphonsum regem et ipsius " successores de jure spectant " et pertinent [i], neque quivis "alius ex Christi fidelibus, " absque ipsorum Alfonsi re-" gis et successorum suorum " licentia specialia * de illis se " hactenus intromittere li-" citè [k] potuit, nec potest " quoquo modo; ut ipse Al-" fonsus rex ejusque successores " et infans eò sincerius huic " tam piissimo ac præclaro, " et omni[l] ævo memoratu " dignissimo operi (in quo " $\operatorname{cum}[m]$ animarum falus, " fidei augmentum, et illius " hostium depressio procuren-" tur [n], Dei ipsiusque fidei ac " reipublicæ universalis eccle-" siæ rem agi conspicimus) in-" sistere valeant et insistant, " quos + fublatis quibusvis dis-" pendiis, amplioribus, seu ‡ " per nos et sedem Apostoli-" cam favoribus et gratiis mu-"nitos fore conspexerint; de " præmissis omnibus et singu-* Lege, speciali. † Lege, quo. ‡ Lege, se. [i] Spectare et pertinere. Corps Diplom. ad marginem. [k] Licere. Id. ib.

[1] Omnium nunc. Id. ib.

[n] Procuraretur. Id. ib.

[m] Cum deest apud Raynald. Id. ib.

"quired and possessed, and "doth possess fuch islands, " lands, havens, and feas, and " they do of right belong and " pertain to the faid king Al-"phon/us, and his fucceffors, " nor any other of the faithful " of Christ, without special "licence of them king Al-" phonsus and his fuccessors " could hitherto, nor can by "any means lawfully enter "therein; that he king Al-" phonfus, and his fucceffors " and the infant may be able "more freely to proceed in "this most pious and noble "work, and most worthy of " perpetual remembrance (in "which as the falvation of " fouls, increase of the faith, "and depression of its ene-" mies may be procured, we " behold it as a work where-"in the glory of God, and "faith in him, with the "interest of the common-" wealth of the universal "church are concerned) as "they shall find themselves "fupported by us and the "Apostolical see with fa-"vours and graces being "fully informed of all and "fingular the premises, we " lis

" lis plenissimè informati, 1110-" tu proprio, non ad ipforum " Alfonsi regis et infantis, vel " alterius pro eis nobis super " hoc oblatæ petitionis instan-"tiam, maturaque prius desu-" per deliberatione præhabita, " auctoritate Apostolicî, et ex " certa fcientia de Apostolicæ " potestatis plenitudine; li-" teras facultatis præfatas (qua-" rum tenores de verbo ad ver-"bum præsentibus haberi vo-" lumus pro infertis, cum om-" nibus vel fingulis in eis con-" tentis claufulis) ad Ceptensem " et prædicta, et quæcunque " alia, etiam ante datam dic-" tarum facultatem literarum " acquisita, et ea quæ in pos-" terum nomine dictorum Al-" fonsi regis, suorumque suc-" cessorum, et infantis in ipsis " ac illis circumvicinis, et ul-"terioribus ac remotioribus " partibus de infidelium feu " paganorum manibus acquiri "poterunt, provincias, infu-"las, portus, et maria quæ-" cunque, extendi, et illa sub-

"do, of our mere motion, " not at the instance of them " king Alphonsus and the in-" fant, or on the petition of " any other to us offered on " their behalf hereupon, and " upon mature deliberation " first had, by Apostolical au-"thority, and from certain "knowledge of the fulness of " Apostolical power, by the "tenor of these presents dc-"cree and declare the afore-" faid letters of faculty (the "tenor whereof we will to be held as if inferted word " for word in these presents, "with all and fingular the " clauses in them contained) " to be extended to Ceuta, and to the aforefaid and all other " acquests whatever, "those acquired before the " date of the faid letters, and those provinces, islands, " havens, and feas whatever " which hereafter, in the " name of the faid king Al-" phonsus, and his successors, and of the infant in those and the adjoining, and in more " distant and remote parts " shall be acquired from the " hands of infidels or pagans, " and them to be compre-" ejusdem

Christian

"ejusdem facultatis literis " comprehendi [0], ipsarum-" que facultatis et præsentium "literarum vigore, jam ac-" quisita, et quæ in suturum "acquiri contigerint, post-" quam acquisita fuerint, ad "præfatum regem et succes-" fores fuos ac infantem, ip-" famque conquestam, quam " a capitibus de Barador [p] et " de Nam usque per totam "Ghineam, videlicet versus il-" lam meridionalem plagam " extendi, harum ferie decla-" ramus, etiam ad ipsos Alfon-" fum regem, fuccessores suos " ac infantem, et non ad ali-"quos alios, spectasse et perti-"nuisse, ac in perpetuum " spectare et pertinere de jure; " nec non Alfonsum regem, et " fuccessores suos ac infantem " prædictos in illis et circa ea

[p] Bonador. Id. ib.

"hended under the faid let-"ters of faculty, and by "force of those and of the " present letters of faculty "the acquests already made, "and what hereafter shall "happen to be acquired, "after that they shall be ac-" quired, we do by the tenor " of these presents decree and " declare have pertained, and "for ever of right do belong " and pertain, to the aforesaid "king and his fucceffors and "to the infant, and not to "any others whatever, and "the conquest which in the "course of these letters we "have declared to be ex-" tended from the capes of Ba-" rador * and of Nam + through * Bojador. " all Ghinea, namely towards "that fouthern quarter, to

" have belonged and pertain-" ed to, and for ever of right "to belong and pertain, to

"them king Alphonfus his " successors and the infant.

"We also by the tenor of "these presents decree and

" declare that king Alphonjus

"and his fucceffors and the

"infant aforesaid might and

"may, now and henceforth,

" freely and lawfully in them " quæ-

[[]o] Contineri. Corps Diplom. ad marginem.

"quæcunque prohibitionis "statuta et mandata, etiam " pœnalia, et cum cujusvis "tributi impositione facere, " et de ipsis ut de rebus pro-" priis et aliis ipforum domi-"niis disponere et ordinare " potuisse, ac nunc et in futu-"rum posse libere et licite, " tenore præsentium decerni-" mus et declaramus. Ac pro " potioris juris et cautelæ fuf-" fragio, jam acquisita, et quæ "in posterum acquiri con-"tigerit, provincias, infulas, " portus, loca, et maria quæ-" cunque, quotcunque et qua-" liacunque fuerint, ipfamque conquestam a capitibus de " Baradoch [q] et de Nam " prædictis Alfonso regi et suc-" cessoribus suis regibus dicto-"rum regnorum ac infanti " præfatis perpetuò donamus, " concedimus et appropriamus " per præfentes, " 5. Præterea, cum ad per-

fal Beradoch. Corps Diplom, ad mar-

"ficiendum opus hujusmodi

" and concerning them make "any flatutes and decrees of " prohibition whatever, even "penal ones, and with im-" position of any tribute, and " of them, as of their own " effects and other their do-" minions, dispose and ordain. "And for the obtaining a "better right and affurance " we do by these presents for "ever give, grant and appro-" priate to the aforefaid king " Alphonfus and his fuc-" ceffors, kings of the faid. "kingdoms, and to the in-" fant, the provinces, islands, " havens places and feas " whatfoever, how many fo-" ever, and of what fort fo-" ever they shall be, that are " already acquired, and that " shall hereafter happen to be-" acquired, and the conquest " also from the capes of Bara-" doch and of Nam aforesaid. " 5. Moreover, forasmuch " as to the perfecting a work. " of this kind it be mani-" foldly meet, we freely and " lawfully decree, and unto-" him Alphonfus and his fuc-" ceffors kings of Portugal " who shall be hereafter, and

66 to the infant aforefaid grant

" num,

[[]q] Boradoch. Corps Diplom. ad marginem.

"num, quod Alfonsus rex et " fucceffores ac infans prædicti, " nec non personæ quibus hoc "duxerint, feu aliquis ipfo-" rum duxerit, committendum, " illius dicto Joannis * regi, per "felicis recordationis Marstinum V, et alterius indul-"torum etiam inclytæ memoriæ Eduardo eorundem " regnorum regi, ejusdem Al-" fonsi regis genitori, per piæ " memoriæ Eugenium IV, Ro-"manos pontifices prædecef-"fores nostros concessorum, " versus dictas partes cum " quibusdam Saracenis et in-"fidelibus de quibuscunque "rebus et bonis ac victuali-"bus emptiones et venditi-"ones, prout congruit, fa-"cere; nec non quoscun-" que contractus inire, transi-"gere, pacifci, mercari, ac "negotiari, et merces quaf-"cunque ad ipsorum Sara-" cenorum et infidelium loca, " dummodò ferramenta, lig-"namina, funes, naves, feu " armaturarum genera non " fint, deferre, et ea dictis Sa-" racenis et infidelibus ven-" dere; omnia quoque alia et

" fuccessors and the infant, as "also the persons to whom "they shall commit the same, "or any one of them shall "think fit to commit this "work, may, according to "the grant made to the faid "king John by Martin the "Fifth of happy memory, "and another grant made "also to king Edward of " illustrious memory, king of "the faid kingdoms, father " of the faid king Alphonfus, " by Eugene the Fourth of " pious memory, Roman pon-"tiffs, our predecessors, make "purchase and sales of any "things and goods and vic-"tuals what soever as fuiteth "with certain Saracens and "infidels; also may enter in-" to any contracts to transact, " bargain, buy and negotiate, "and to carry any wares "whatever to the places of " those Saracens and infidels, " provided they be not iron-"wares, wooden-wares, cor-" dage, ships, or any kinds of "arms, and them may fell to " the faid Saracens and infi-" dels; also may do, perform "fingula

" and indulge, that the afore-

" faid king Alphonfus and

* Lege, Jeanni.

" fingula in præmissis, et circa " ea opportuna vel necessaria " facere, gerere vel exercere, "ipfique Alfonsus rex, suc-" cessores et infans, in jam ac-" quisitis, et per eum acqui-" rendis provinciis, infulis, ac "locis quascunque ecclesias, " monasteria, et alia pia loca "fundare, ac fundari et con-" strui, nec non quascunque " voluntarias personas ecclesi-" afticas, feculares, quorumvis " etiam mendicantium ordi-" num regulares (de fuperi-" orum tamen fuorum licen-" tia) ad illa transmittere, ip-" fæque perfonæ inibi etiam, " quæ advenerint, commorari, " ac quorumcunque in dictis " partibus existentium, vel ac-" cedentium confessiones au-" dire, illisque auditis, in om-" nibus, præterquam fedi præ-" dicta refervatis casibus, de-" bitam absolutionem impen-" dere, ac pœnitentiam falu-" tarem injungere, nec non " ecclefiastica facramenta mi-" nistrare valeant, liberè ac li-" citè decernimus, ipsique " Alfonso et successoribus suis " regibus Portugalliæ, qui erunt " inposterum, et infanti præfa-

"or exercise all other and "fingular, fit and necessary " things in and about the faid " premises; and that they "king Alphonfus, fucceffors " and the infant, in the pro-" vinces, islands, and places " already acquired, and by " him [or them] to be ac-"quired, may found, and "cause to be sounded, and " built any churches, mo-" nasteries, and other pious " places; also may transmit " to them any voluntary ec-" clefiastical persons whatever, " feculars, alfo regulars " any of the mendicant or-"ders (with licence how-" ever of their fuperiors) "and that those persons "there may abide where "they shall arrive, and hear "the confessions of any "living in the faid parts, " or coming thither, and "being heard, in all cases, "those reserved to the see "aforefaid excepted, give "due absolution, and sa-"lutary pennance enjoin, "also minister ecclesiastical " facraments: And all and " fingular the faithful of "Christ, ecclesiastics, secu-Christian Era." lars, and regulars of what-

"foever orders, in what part of the world foever ap-

" pointed, of whatfoever state,

"degree, order, condition, or præeminence they shall

" be, although dignified with

" archiepiscopal, episcocal, im-

" perial, regal, reginal, du-

" cal, or any other greater

" ecclesiastic or worldly dig-

" nity, we entreat in the Lord,

" and by the sprinkling of the blood of our Lord Jesus

" Christ, whom as premised it

" concerneth, we exhort, and

" on the remission of their firs enjoin: Also by this

"fins enjoin: Also by this perpetual edict of prohibi-

" tion we more strictly inhi-

" bit that they do not by any

"means prefume to carry

" arms, iron, wooden-wares,

"and other things by law

"prohibited to be any ways

" carried to the Saracens, to

"the provinces, islands, havens, seas, and places what-

"ever acquired or possessed.

"in the name of king Al-

" phonfus, or situated in this

"conquest or elsewhere, to

"the Saracens, infidels or pa-

"gans; or even without spe-

" etiam

" to, concedimus et indulge-"inus; ac universos et sin-" gulos Christi fideles, ecclesi-" afticos, feculares, et ordinum "quorumcunque regulares, u-"bilibet per orbem constitu-" tos, cujuscunque status, gra-"dus, ordinis, conditionis vel " præeminentiæ fuerint, eti-" amfi archiepiscopali, episco-" pali, imperiali, regali, re-"ginali, ducali, seu alia qua-" cunque majori eccletiasticà " vel mundanâ dignitate præ-" fulgeant, obsecramus in Do-" mino, et per aspersionem san-" guinis Domini nostri Jesu "Christi, cujus, ut præmitti-" tur, res agitur, exhortamur, " eisque in remissionem suo-"rum peccaminum injungi-" mus; nec non hoc perpetuo " prohibitionis edicto distric-" tius inhibemus, ne ad acqui-" fita seu possessa nomine Al-" fonsi regis, aut in conquista " hujusmodi consistentia pro-" vincias, infulas, portus, ma-" ria, et loca quæcunque, seu " aliàs ipsis Saracenis infideli-" bus vel paganis arma, fer-" rum, lignamina, aliaque à ·· jure Saracenis deferri pro-" hibita quoquo modo; vel

" etiam absque speciali ipsius " Alfonsi regis, et successorum 44 fuorum, et infantis licentia, " merces et alia à jure permissa " deferre, aut per maria hu-" jusmodi navigare, seu deferri " vel navigari facere, aut in il-" lis piscari, seu de provinciis, " infulis, portubus, maribus, et " locis, seu aliquibus eorum, " aut de conquista hujusmodi " fe intromittere, vel aliquid " per quod Alfonsus rex et " fucce lores sui, et infans præ-" dicti quominus acquisita et " possessa pacifice possideant, " ac conquistam hujusmodi " prolequantur, et faciant per " se vel alium seu alios, directè " vel indirectè, opere vel con-" filio, facere aut impedire 4 quoquo modo præfumant.

"6. Qui verò contrarium fecerit, ultra pœnas contra deferentes arma et alia pro- hibita Saracenis quibuscun- que à jure promulgatas, quos illos incurrere volumus ipso facto, si personæ fuerint fingulares, excommunicationis fententiam incurrant; si

"cial licence of him the faid " king Alphonfus, and of his " fuccessors, and of the in-" fant, to carry or cause to be "carried merchandize and " other things by law permit-"ted, or to navigate or cause "to be navigated those seas, "or to fish in them, or to in-"trude themselves into the " provinces, islands, havens, " feas, and places, or any of "them, or into fuch con-" quests, or to do any thing "directly or indirectly, by "deed or counsel, or to ob-"ftruct the aforesaid king " Alphonfus and his fucceffors " and the infant from quietly " possessing their acquests and " poffessions, and profecuting " and performing this con-"quest by themselves or " other or others.

"6. And whosoever shall act contrary, besides the puinstruments pronounced by law against those who carry arms and other prohibited things to any of the Saracens, which we will them to incur by so doing; if they be single persons, they shall incur the sentence of excommunity, munication; if a community,

Chaidian Æra.

" communitas, vel universitas, " civitas, caftri, villæ, feu loci; " ipsa civitas, castrum, villa seu " locus interdicto subjaceat eo " ipso, nec contra facientes " ipfi vel aliqui eorum ab ex-" communicationis fententia " absolvantur, nec interdicti " hujusmodi relaxationem A-" postolică, seu alia quavis " auctoritate obtinere possint, " nisi ipsi Alfonso, et succes-" foribus fuis, ac infanti prius " pro præmissis congruè satisfe-" cerint, aut desuper amicabi-" liter concordaverint cum " eisdem: mandantes per A-" postolica scripta venerabili-" bus fratribus nostris archi-" episcopo Ulixbonensi, Silvensi " ac Ceptensi episcopis, quatenus " ipfi, vel duo, aut unus co-" rum per se, vel alium seu " alios, quotiens pro parte Al-" fonsi regis, et illius successo-"rum ac infantis prædicto-" rum, vel alicujus eorum de-" fuper fuerint requisiti, vel " aliquis ipforum fuerit requi-" fitus, illos, quos excommuni-

" or university, city, castles, "villas, or places, that city, -" castle, or place shall be there-" by subject to the interdict, and " neither they who act con-" trary be themselves, or any " of them, absolved from the " fentence of excommunica-" tion, or obtain relaxation of " this interdict, by Apoltolical, " or any other authority, un-" less they shall first have " made due satisfaction for " the premises unto him Al-" phonfus and his fuccessors, " and the infant, or shall have " thereupon amicably agreed "with them; enjoining by " [these] Apostolical writings " our venerable brothers the " archbishop of Lisbon, the li-" Shops of Sylves and Cruta, " that they, or two, or one of " them, by himfelf, or other " or others, as often as they, " or two, or any one of them " shall be thereupon request-"ed on the part of the " aforefaid king Alphonfus " and of his fucceffors, and "the infant, or any one of "them, do declare and de-" nounce by Apostolical au-"thority those whom he hath " determined to have incurred " cationis

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" cationis et interdicti sententias " hujusmodi incurrisse constituit, " tamdiu Dominicis aliisve festi-" vis diebus in ecclesiis, dum " inibi major populi multi-"tudo convenerit ad divina, " excommunicatos et interdictos, " aliifque pænis prædictis in-" nodatos fuisse et esse aucto-"ritate Apostolicà declarent " et denuntient, nec non ab " aliis nuntiari, et ab omnibus " arctius evitari faciant, donec " pro præmissis, satisfecerint " feu concordaverint, ut præ-" fertur. Contradictores, &c."

Dat. Romæ apud S. Petrum, anno incarnationis Dominicæ 1454, 6 Id. Januarii. Pontificatus nostri anno 8^{vo}.

" fuch fentences of excommu-"nication and interdict on "the Lord's and other festi-" val days in the churches, "while the greater multi-" tude of people shall there "affemble for divine wor-" ship, excommunicated and "interdicted, and to have "been and to be involved " in the other punishments "aforefaid; also shall cause "to be made known "others, and them to be " ftrictly avoided by all, till " they shall have made fatis-" faction or agreement for "the premifes as aforefaid. "Offenders, &c."

Given at Rome at St. Peter's in the year of our Lord's incarnation 1454, the 6th of the Ides of January. Of our Pontificate the 8th year.

Pope Nicholas dying on the 24th of March 1455, he was fucceeded by Calixtus the Third, who, before his death on the 6th of August 1458, confirmed this grant of pope Nicholas. Fernandus Rebellus, a dignified ecclesiastic in Portugal, of which he was a native, in his work entitled, Of the Obligations of Justice, Religion, and Charity, undertaking to maintain the pope's power of making these grants, hath inserted in his 18th book large extracts from the bull of Calixtus, containing the principal

principal matters recited in it from the bull of pope Nicholas, Climan Arra. together with the confirmatory parts of this latter bull.

1481.

In 1460 prince Henry died.

King John the Second, succeeding his father Alphonsus, sent Azambuja with 100 artificers, 500 foldiers, and all necessaries to build a fort in Guinea; and Garcia de Resende, a Portuguese author of good reputation, in his history of the life of this king, relates that " he fent as embassadors to Edward the Fourth of " England Ruy de Sousa, a man of great wisdom and estima-"tion, with doctor John Delvas, and Ferdinand de Pina as " fecretary, to confirm the ancient leagues with England, with " order to shew and make him acquainted with the title which "the king held in the feigniory of Guinea, to the intent that, " after the king of England had feen the fame, he should give " charge throughout his kingdom that no man should arm or " fet forth ships to Guinea; and also to request him to dissolve a " certain fleet which John Tintam and William Fabian, English " men, were making, under command of the duke of Medina " Sidonia, to go to Guinea; with which embassage the king " of England feemed to be very well pleased, and they were

" together with the necessary confirmations." A renovation of the conventions of Portugal was figured by Rymeri king John at Monte Mayor, on the oth day of February 1482, and king Edward's Confirmation of the leagues of Portugal was executed at Westminster on the 13th day of September following; in both which king John is styled Rex Portugalia et Algarbiorum citra et ultra mare in Africa.

" received by him with great honour; and he condescended " to all that the embaffadors required of him, at whose hands " they received authentic testimonials of their good conduct,

Pope Sixtus the Fourth died, who had fat on the papal throne from the 9th day of August 1471. He confirmed all August 12. the former grants made by his predecessors to the kings of Portugal and their fuccessors; and, to corroborate them, dec.ared that all princes, persons, and communities who should

attempt

attempt to enter the regions that were or might be discovered by them, without their consent, should thereby incur the punishments of excommunication and interdict.

1484, and 1485.

The kingdom and river of *Congo*, and all the fea-coast extending thence to the 22d degree of fouth latitude, were discovered.

1486.

Bartholomew Diaz being fent with three ships made farther discoveries, and at length came to what had been so long fought, the extreme land of Africa towards the fouth, which by reason of a violent storm they met with they called cape Tempestuous; but the king at their return, because it promised the discovery of a navigation to *India*, called it by the name which it now bears, the cape of Good Hope [d]. Maffæus, a native of Bergamo in Lombardy, whom several princes, for the fake of his qualifications, endeavored to draw into their fervice, having formed a defign of writing the history of India, upon the approbation of Philip the Second of Spain, who to animate him herein promoted his brother to an office of honour and profit, undertook it. To collect proper materials for this work he went to Liston; and, notwithstanding its comparative brevity [e], being remarkably careful of his matter and language, he is faid to have fpent twelve years in composing it. This author [f] gives the following relation of this discovery. "Bartholomew Diaz [one] of the familiars " of [king] John, a person of extraordinary fortitude and con-66 stancy, feemed not only to have equalled, but even to have "furpassed the renown of former commanders. This man

have been made by him, and in the reign of king John, though some respectable authors of other nations have supposed it to have been made by Vasco de Gama in 1497, that is, in the reign of king Emanuel.

[e] In the Cologne edition, in folio, the whole is contained in 331 pages.

[f] Hift. Indic. lib. i.

[[]d] Manuel de Faria y Sousa, a native of Portugal, and knight of the order of Christ, in the 1st vol. of his Portuguese Asia, written in Spanish, and published at Liston in the year 1666, relates this discovery to have been made by Diaz in the year here assigned; and I have seen no Portuguese author who does not suppose this discovery to

"had a long struggle not only with the winds and sea, but also with his naval companions, wearied with the tediousness of such a long voyage, and with daily reproach requiring a return; whose sierceness and expostulations having mitigated with prudence and mildness, and passed a long way beyond Cam's pillars [placed in lat. 22 degrees S.] he opened at length that vast projection of land, which runneth out to the south from interior Athiopia in a direct length upwards of 600 leagues; nor was deterred by so portentous a magnitude, with the most horrible tempests, from turning the cape, and shewing that the whole globe is pervious to men of magnanimity and experience."

This cape being discovered king John sent persons to explore India and Abassinia, or eastern Æthiopia, and to establish friendship and correspondence with the king of the latter, who was a christian; and also to enquire into the course of the land and sea supposed to extend thence to the cape of Good Hope. These persons, being deterred by the difficulties arifing from their ignorance of the necessary language, returning from Jerusalem, he sent Pedro de Covillam and Alonzo de Paiva, who were well skilled in the Arabic tongue, with such orders that either might take the other's place, if occasion required. Arriving at Alexandria they went thence in the character of merchants to Cairo, where having with ease joined the Mahometan travellers they came fafe to Ayla, whence they proceeded to Aden, a fortified town near the mouth of the Arabian gulph. Here they parted, Covillam fetting out for India, and Paiva on the embaffy to the king of the Abaffines, having first agreed that their business being done they would meet again at Cairo. Paiva died in a manner unknown, before he arrived at the king's palace. Covillam arrived fafe in India, and having discovered the nature of all its commerce, made a particular state of the whole in writing, and carefully placed Goa, Calecut, Cochin, and other Indian mart-towns in a chart which he had received from king John for that purpose,

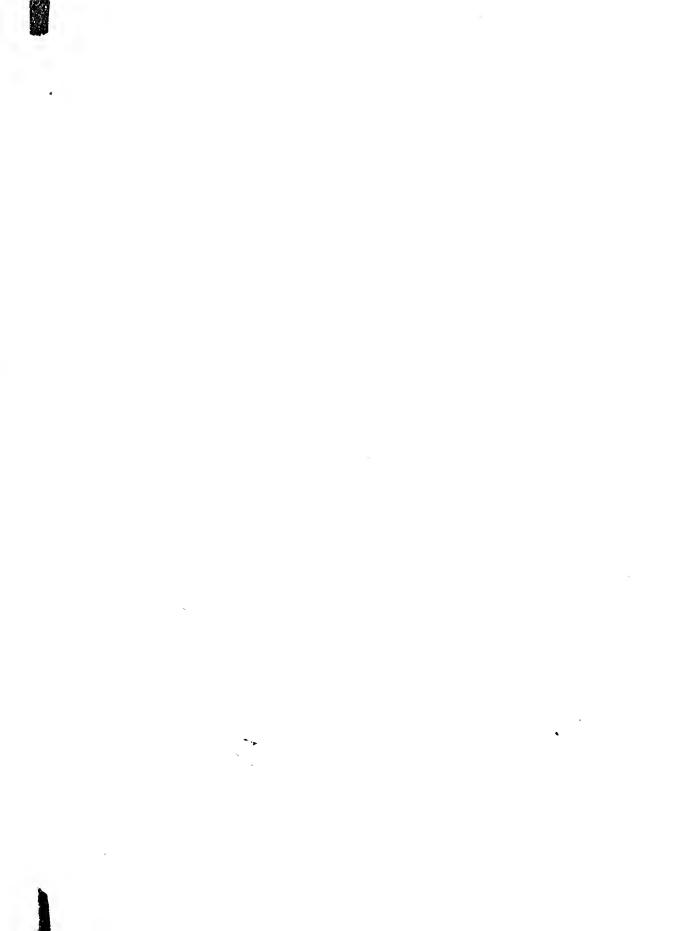
he returned into Africa, and continuing his enquiries was fatisfied that the African coast extended in a continued course to the cape of Good Hope, and that without doubt it might be circumnavigated. Upon his arrival at Cairo he was informed that Paiva died in the beginning of his expedition; whereupon, having prepared his account of the Indian commerce, and the map, with his notes in Hebrew, and his letters to king John, containing advices of all his past proceedings, of Paive's death, and his purpose of going himself to the king of the Abassines, with his recommendations to the king strenuously to pursue his design, for that those commanders who had already turned the extreme cape of Africa might without much difficulty proceed to India, whereby great glory and riches would be acquired, he delivered his dispatches to Portuguese merchants at Cairo, to be carried to the king; which coming fafe to his hands he thereupon refolved, without regarding expence or danger, to complete this navigation, whereby not only great honour and wealth would accrue to his own kingdom, but also the commodities of India consumed in other christian states would be freed from the large customs paid to Mahometan princes, in the course of their passage through their dominions, which greatly augmenting their treasures strengthened them against the Christians; and for that end felected the most able of his commanders, and gave orders for building thips of the best form and materials for encountring the feas; but his defigns were prevented by his death on the 25th of October 1495, at the age of forty years - Of this king, who for his great wisdom and excellence was furnamed The Perfect, it may be observed that he was solicitous by munificence, amity, and prudence, rather than by acts of violence, to enlarge and fecure his acquibitions; and Maffæus fays that "effeeming it a principal point to comprehend in friendship "the dynasties of the coasts already known, he effected it " without much difficulty, and established peace and society

"on certain conditions with Bezeguicus, Caramanfa, Baius "Samanus, and other petty kings" - that "to make dif-"coveries he fent men of approved virtue and fidelity, his " familiars; and that they might do this more willingly, and "with less danger of error commit themselves to the vast " ocean, he gave in charge to the most skilful mathematicians "at that time, Rotheric and Joseph his physicians; and also " to Martin Bohemus, who valued himself on having been a " a scholar of Monteregius, by their united consideration to " devife fomewhat for directing the course of ships in an un-"known fea; fo that, if the failor should even be born from "the view of stars familiar to him, he might by some method "conjecture under what part of the heaven he was, and in "what remote places from our world; who having well con-" fidered the matter for fome time, did at length by an illu-" ftrious invention adapt the instrument [called] the astrolabe "to maritime affairs, which before aftronomers only had been " accustomed to use for tracing the motions of the stars; and "with like ingenuity they formed tables of declinations, "which failors to this day use to find, what cosmographers "call, the latitude of places; wherefore on this account " likewise all Europe is not a little obliged to Portugal."

The END of the FIRST PART.

ERRATA.

Page. 14. 16. 1bid.	Line 4. Reduce the first semicolon to a comma. 1. read Leon. 17. read he being in the tenth year of his age (being born on the 4th of October 1379) 8. dele from. 12. read interred. In the note from Spelman read notat viculum.	Page. 53. 66. 69. 99. 106.	Line. In the note [q] dele the comma after Third. 16. place a comma after feripti. 1. read revolutions. 9. read 143 ^d Olymp. 1. place a full ftop after 500, and in the 2' line after the word [miles]. laft but two, place a comma after graces. 2. dele the comma after fingular.
29. 32.	5. read spheroidal. 25. dele the comma after Eratosthenes, and add it after Hipparchus.	Ibid.	11. dele the comma after founded, and add it after built.



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